Community Development Plan

Final Draft Report May 24, 2004

Prepared for:

North Andover Community Development & Services Division

Prepared by: Community Opportunities Group, Inc. Boston, Massachusetts

Transportation Planning & GIS Mapping Services by: Merrimack Valley Planning Commission
Haverhill, Massachusetts

TABLE OF CONTENTS

EXECUTIVE SUMMARY	
1. Scope	
PROFILE: NORTH ANDOVER	
Population Characteristics	
Community Values	
ECONOMIC DEVELOPMENT	10
1. Lucent Technologies/1600 Osgood stri	EET
	12
<u>e</u>	s1:
	1
2. ZONING REVIEW	18
	18
	22
Recommendations	20
HOUSING	3
Housing Trends	39
Housing Affordability	4
Planning Considerations	44
Recommendations	48
OPEN SPACE & RESOURCE PROTECTION .	55
Natural Resources and Land Use Suitability M	ap5
Habitat Preservation and Water Resource Prote	ection Priorities56
D	E

EXECUTIVE SUMMARY

1. SCOPE

The North Andover Community Development Plan consists of several components:

- Transportation and associated mapping services by Merrimack Valley Planning Commission (MVPC), with particular emphasis on traffic and public safety issues at Route 114/Peters Street and Route 125/Holt Road.
- Economic Development, including:
 - An economic development database.
 - An economic profile of the town, considering population and labor force trends, education levels, household wealth, local employment, transportation services, and workforce development.
 - A review of North Andover's commercial and industrial development regulations.
 - An evaluation of possible options for reuse of the Lucent Technologies plant on Osgood Street.
 - Opportunities to create or retain jobs for low-, moderate-, and middle-income individuals.
 - An update of the economic development goals outlined in North Andover's Master Plan 2000.
- Housing, with special emphasis on preserving North Andover's existing affordability, and creating new housing through adaptive reuse/redevelopment of residential and nonresidential buildings, and infill development.
- Open Space, including recommendations for resource protection steps the town should take
 in addition to those outlined in North Andover's most recent <u>Open Space and Recreation</u>
 <u>Plan</u>.
- An action plan and timeline.

This report includes the economic development, housing and open space components of North Andover's community development plan.¹ MVPC has provided the transportation analysis and maps to the town in a separate submission.

¹ The economic development database was delivered to the town on CD-ROM in 2003.

2. RECOMMENDATIONS

The Community Development Plan includes the following recommendations (see also, Map 1).

Economic Development

Summary. North Andover's existing zoning is complicated and contains a number of subtle but important inconsistencies. The bylaw provides for ten commercial and industrial districts and often, they are located randomly around town, with little sense of connection between them. At times, the districts seem to have been created for particular projects or sites rather than as a result of planned choices. In addition, the town's use and dimensional regulations should be updated, clarified and coordinated in a way that reduces the potential for use conflicts and increases the economic worth of land zoned for business and industrial development.

North Andover has few if any options to rezone additional land for non-residential use. Moreover, the town has to think carefully about the environmental, traffic and quality-of-life implications of placing large amounts of land in commercial and industrial use. "Fiscal zoning" – land use policies adopted for the sole purpose of generating revenue and reducing costs – usually bring unanticipated and unwanted consequences. North Andover already has established built assets that can be used, reused and redeveloped more intensively for new business and industry, notably the former Lucent Technologies plant on Osgood Street. The town needs to focus its economic development attention on all that will be required to restore 1600 Osgood Street as a viable industrial center.

North Andover <u>does</u> have options to encourage more intensive use of land in existing commercial and industrial districts. Its dimensional, density and parking regulations effectively limit development in ways that may not be obvious to local officials and residents. Regulatory strategies to encourage higher-density development in existing business districts will make these areas more valuable to the town's economy and tax base.

Consolidate and reorganize the Business and Industrial Districts.

Commercial DistrictsIndustrial DistrictsDowntown BusinessIndustrial-1Neighborhood BusinessIndustrial-2Commercial BusinessTransitional (Mixed-Use) Business District

- Add clear use definitions and classify uses by compatibility and similarity of impacts.
- 3. Provide "campus-style" industrial development regulations for industrial parcels of 10 or more acres.
- 4. Allow frontage waivers and/or a higher floor area ratio (FAR) by special permit in the (proposed) Neighborhood and Commercial Districts in exchange for:
 - Access management: shared driveways and shared parking area or structured parking facility serving two or more commercial sites.

- For redevelopment projects, reduce or eliminate existing front parking and relocate parking areas to the side and rear of a site.
- Sub-grade parking (for which a height waiver may also be required in Neighborhood Business.
- Developer contribution to a community facilities fund, based on a fee schedule established by the town pursuant to its capital improvements plan, for sidewalks, landscaping, lighting, pedestrian/bicycle and other amenities in the business districts.
- 5. Prohibit parking between the street and the front of new commercial buildings and reduce minimum front yard setback requirements in all commercial districts.
- 6. Require wide sidewalks <u>particularly</u> in Neighborhood Business District developments wherever feasible, or allow the developer to pay a fee in lieu of sidewalks to a community facilities fund.
- 7. Allow a higher FAR and modest increase in building coverage in the Industrial-1 and Industrial-2 Districts in exchange for a significant reduction in surface parking area by providing sub-grade parking or a structured parking facility.
- 8. Adopt design guidelines for commercial and industrial development, and incorporate architectural design review into the Site Plan Review process.
- 9. Establish a maximum gross floor area (GFA) for commercial uses in the (proposed) Downtown Business and Neighborhood Business Districts, and a GFA threshold over which a special permit would be required for commercial uses in the Commercial Business District. Include large-scale commercial development design requirements in the special permit granting criteria.
- 10. Encourage two-family homes, multi-family dwellings and accessory dwellings in commercial buildings, especially in the Downtown Business and Neighborhood Business Districts. For vertical mixed-use buildings, increase the maximum GFA for accessory residential uses to 65% from the existing 50%.
- 11. Eliminate the "Fiscal Impact" submission currently required under Site Plan Review. Fiscal impact may be an appropriate consideration when reviewing a proposed use, but Site Plan Review is not a review procedure for <u>use</u>. Rather, it is a review for the design, public safety, public utilities and operational features of a proposed development. The town could not reject a site plan submission on the basis of a fiscal impact analysis, so requiring the developer to supply one seems excessive.
- 12. Institute a minimum requirement for open space as a percentage of lot area in all commercial and industrial districts except the Downtown Business District.

Housing

- Adopt a mandatory open space-residential development bylaw for new housing developments of more than five homes, by special permit from the Planning Board.
- 2. Replace the Phased Development Bylaw with a new Growth Management Bylaw: set a maximum number of dwelling units that may be permitted annually, with "opt-out" provisions by special permit for types of development that address the town's housing and open space needs, such as:
 - The inclusion of affordable dwelling units.
 - The inclusion of a mix of housing types units both large and small, for individuals, couples and families.
 - The provision for more open space than the minimum required under the open spaceresidential development bylaw.
 - Conversion of older homes to two-family or multi-family units.
 - Payment of a fee in lieu of phasing development, with fee revenue placed in a special trust fund for neighborhood facilities, bicycle trails and sidewalks, or parks.
- 3. Adopt a demolition delay bylaw to obtain review authority over <u>whole or partial demolition</u> of any building over a certain age, e.g., 50 years.
- 4. Adopt preservation incentives in the Zoning Bylaw to encourage reuse of existing structures for affordable housing: greater use intensity where appropriate, by special permit, in the R-1, R-2 and R-3 Districts and outside of the Watershed Protection District. (Conversions are already allowed as of right in R4 and R6).
- 5. Develop a target list of single-family, multi-family and condominium properties for acquisition/rehabilitation in exchange for permanently affordable housing units, and establish a funding pool with CPA revenue.
- 6. Develop a Comprehensive Permit Policy to guide local decision-making about affordable housing proposals and assist developers with addressing North Andover's housing needs.
- Designate areas that are appropriate for higher-density housing and infill development, and rezone them accordingly.
 - Allow mixed-use development (residential and commercial) by special permit in portions
 of the existing R4, R2 and GB Districts, provided that the residential component of a
 mixed-use development includes deed-restricted affordable housing units.
 - Adopt infill development regulations.

- Pursue "Local initiative" housing, e.g., housing developed under a Local Initiative Program (LIP) comprehensive permit or in partnership with a non-profit development corporation.
- 8. Submit a housing plan to DHCD for approval as a Chapter 40B Production Plan <u>after</u> the town institutes the policies and regulations necessary to implement the plan.

Open Space

- 1. Consider a home rule petition to establish a Lake Cochichewick Management Commission that has development review and permitting powers within the Lake's watershed.
- 2. Focus open space and recreation resources (volunteer, staff and funds) on implementing North Andover's <u>existing</u> plans. New planning initiatives should be limited to the next open space plan update in 2005 and a Water Master Plan.

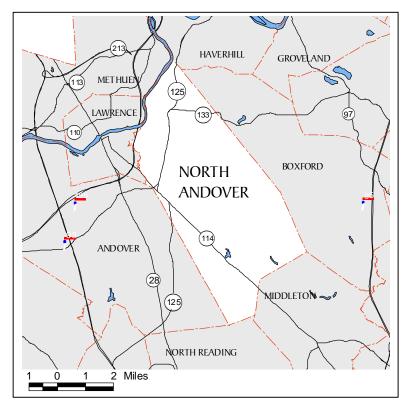
3. ACTION PLAN AND TIMELINE

Timeline (CY)	Recommendation/Action	Leadership Required	Resources Required
2004-2005	Reorganize & consolidate the Business and Industrial Districts, substantially in accordance with the recommendations of this plan.	Community Development Planning Board	Consulting services or Merrimack Valley Planning Commission (MVPC) for mapping and planning support.
2004-2005	Amend Zoning Bylaw by adopting a mandatory open space-residential development bylaw.	Community Development Planning Board Conservation Commission	Technical assistance from MVPC or Alliance for Green Neighborhoods.
2005	During the next <u>Open Space & Recreation</u> <u>Plan</u> update, consider establishing a Lake Cochichewick Management Commission.	Community Development Conservation Commission Planning Board Board of Selectmen	Can be done with in-house resources.
2005	Develop a Comprehensive Permit Policy Statement and determine whether the town should submit a Chapter 40B Production Plan to DHCD.	Community Development Housing Partnership Board of Selectmen	Can be done with in-house resources.
2005	Develop a target list of single-family, multi- family and condominium properties for acquisition/rehabilitation in exchange for permanently affordable housing units, and establish a funding pool with CPA revenue	Housing Partnership Community Preservation Committee	Can be done with in-house resources, including data and technical support from Assessor's Office.
2006	Amend Zoning Bylaw to include clear use definitions, and classify uses.	Community Development Planning Board	Consulting services or MVPC for planning support.

Timeline (CY)	Recommendation/Action	Leadership Required	Resources Required
2006	Amend Zoning Bylaw by updating and strengthening the Site Plan Review regulations, to include design guidelines and design review standards for commercial, industrial and multi-family development. Eliminate fiscal impact submission requirement.	Community Development Planning Board	Consulting services from a team that includes an architect and a landscape architect.
2006	Adopt demolition delay bylaw. Amend the Zoning Bylaw to provide preservation incentives for historically important buildings in R-1, R-2, R-3 Districts and the Downtown Business District.	Community Development Planning Board Historical Commission	Can be done with in-house resources. Mass. Historical Commission maintains a library of demolition delay bylaws.
2007	Replace Phased Development Bylaw with a new Growth Management Bylaw that includes incentives to address town planning goals.	Community Development Planning Board	May need consulting services or MVPC for planning support; could be done in- house if time permits. Requires information from Town Manager, Capital Improvements Plan Committee, Finance Committee.
2008	Amend the Zoning Bylaw by changing the off-street parking requirements substantially in accordance with the recommendations of this plan.	Community Development Planning Board	Can be done with in-house resources. Will require consultation with DPW.

PROFILE: NORTH ANDOVER

North Andover is located 24 miles north of Boston in the Merrimack Valley region. Bounded by Andover, Lawrence, Methuen, Haverhill, Boxford, Middleton and North Reading, North Andover offers easy access to regional highways, a well-respected school system, great neighborhoods, and a considerable amount of open space. Although its 26.7 mi² land area makes North Andover a fairly large town, it retains a number of small-town qualities: family oriented, an active, participatory town government, and a strong sense of community. These qualities mean that North Andover is poised to attract businesses, employees and residents.



The North Andover Master Plan (Update 2000) highlights several of the town's strengths, including:

- · Retained features of North Andover's roots: agricultural legacy and industrialization
- Housing diversity (architectural styles, housing sizes and types, location and cost)
- Highly educated workforce
- Economy that supports leading edge firms and small businesses
- Outstanding public school system and private college
- Affordable tax structure for homeowners and businesses

Assets such as these will continue to influence the size, structure and health of North Andover's economy.

POPULATION CHARACTERISTICS

Population Growth

Location, available land and prestige make North Andover very attractive to suburban home seekers in the Lawrence-Haverhill metro area. Although it is not the region's most rapidly growing town, North Andover experienced a relatively high rate of population, household and housing unit growth between 1990-2000. Recent trends pale in comparison to the town's growth experience when I-495 was completed in the 1960s, but throughout the last half of the 20th century, North Andover witnessed a fairly consistent pace of housing development. Two decades of declining population growth rates were reversed by changes that occurred during the 1990s, when North Andover absorbed both population and housing unit growth at a rate significantly higher than the state's overall experience. Table 1 reports population changes in North Andover and ten surrounding communities since 1950. Today, the town's population density of 1,019.9 persons per square mile (mi²) is essentially equal to that of neighboring Andover.

Table 1: Regional Population Trends

	Area (mi²)	1950	1960	1970	1980	1990	2000
Andover	31.0	12,437	15,878	23,695	26,370	29,151	31,247
Boxford	24.0	926	2,010	4,032	5,374	6,266	7,921
Georgetown	12.9	2,411	3,755	5,290	5,687	6,384	7,377
Haverhill	33.3	47,280	46,346	46,120	46,865	51,418	58,969
Lawrence	7.0	80,536	70,933	66,915	63,175	70,207	72,043
Methuen	22.4	24,477	28,114	35,456	36,701	39,990	43,789
Middleton	14.0	2,916	3,718	4,044	4,135	4,921	7,744
NORTH ANDOVER	26.7	8,485	10,908	16,284	20,129	22,792	27,202
North Reading	13.3	4,402	8,331	11,264	11,455	12,002	13,837
Topsfield	12.7	1,412	3,351	5,225	5,709	5,754	6,141
Wilmington	17.1	7,039	12,475	17,102	17,471	17,651	21,363

Source: Massachusetts Institute for Social and Economic Research (MISER).

North Andover's recent population growth has been attended by shifts in the age composition of its residents. The elderly as a percentage of the state's population dropped minimally from 13.6% in 1990 to 13.5% in 2000, but in North Andover, elders made up 12.4% of the population in 1990 and nearly 14% in 2000. In absolute terms, North Andover's elderly population increased by 817 people or 29%, mainly among persons over 75. The town's experience differs in at least one other respect. The in-migration of families during the 1990s led to a 28% increase in North Andover's under-18 population, yet the state's rose by only 10.9%. Moreover, under-18 population growth statewide occurred among persons 5-17 years of age while the pre-school population declined 3.7%, but in North Andover, the pre-school population increased by 24% between 1990-2000.²

Today's population characteristics in North Andover reflect internal changes that were evident by the end of the 1980s and a higher-than-average in-migration of households during the past decade. On April 1, 2000, the percentage of the population that had lived in the same home for at

² Bureau of the Census, [database online], Census 2000 Summary File 1, Table P11, 1990 Census of Population and Housing, Summary File 1, Table P011.

least five years was lower in North Andover (54.2%) than in all nearby suburbs. The recycling of older homes and a large inventory of new homes help to explain North Andover's overall growth rate and the age profile of its population. Between 1990- 2000, 4.5 new households moved into North Andover for every new housing unit built.³

Not all of the town's population growth is attributable to new families, however. About 12% of North Andover's 1990-2000 population increase consists of persons in shared quarters: college dormitories, off-campus housing and nursing homes. In fact, the rate of group quarters population growth (40.2%) significantly exceeded the rate of household population growth (18%). By Census 2000, the group-quarters population had increased from 5.8% to 6.8% of North Andover's total population. About 71% are students at Merrimack College.

Race & Ethnicity

Like most suburbs, North Andover has experienced not only household and population growth but also change in the racial and ethnic make-up of its people. A decade ago, 97% of the town's 22,792 residents were white, primarily of Irish, Italian and English descent. As of Census 2000, 93% of the 27,202 people living in North Andover were white and while the same ancestries prevailed, the number of persons reporting cultural ties to Eastern Europe, the Middle East and Eastern, South Central and South Eastern Asia increased significantly. Slightly more than 8% of the town's current population is foreign-born, primarily in Asian and Latin American nations.

Households

North Andover's 9,699 households are comprised primarily of families: that is, households of two or more people related by blood, marriage or adoption. The composition of its housing stock, the relative wealth of its population and the town's commitment to high-quality public schools all help to explain North Andover's attractiveness to families, particularly those with school-age children. Table 2 shows that the town surpasses county and statewide norms for percentage of family households, households with children and average household size. North Andover has developed under zoning policies that favor traditional neighborhoods of single-family homes, and its neighborhoods are very appealing to Merrimack Valley homebuyers.

Table 2: Comparison Population Characteristics

Table 2. Comparison reparation characteristics								
	North Andover	Essex County	Massachusetts					
Population	27,202	723,419	6,349,097					
Households	9,699	275,410	2,443,580					
Families	7,012	186,043	1,576,696					
Percent Families	72.3%	67.6%	64.5%					
Average Household Size	2.61	2.57	2.51					
Households w/ Children < 18	3,621	90,854	748,865					
Percent Households w/ Children <18	37.3%	33.0%	30.6%					

Source: Bureau of the Census, Summary File 3, Tables P1, P9, P10.

³ Bureau of the Census, Census 2000, Summary File 3,

⁴ Census 2000, Summary File 1, Table PCT16; and Merrimack College, available on the World Wide Web at http://www.merrimack.edu [cited 12 February 2003].

Household Income

North Andover's median household income of \$72,728 ranks 60th in the Commonwealth and it is about 1.35 times higher than the median for the Lawrence metropolitan area. While one-third of the town's households have annual incomes below the Lawrence area median, 8.7% have annual incomes of \$200,000 or more – a rate that in North Andover's region is surpassed only by Andover, Boxford and Topsfield, as shown in Table 3.

Table 3: Comparison Household Income Statistics

		Households >\$200,000			
	Median Household	Percent of	% Aggregate		
Community	Income (\$)	Households	Income		
Andover	87,683	12.7%	37.9%		
Boxford	113,212	24.0%	52.4%		
Georgetown	76,260	4.0%	12.6%		
Haverhill	49,833	1.6%	9.7%		
Lawrence	27,983	0.9%	10.0%		
Methuen	49,627	1.3%	7.4%		
Middleton	81,395	6.4%	22.2%		
NORTH ANDOVER	72,728	8.7%	29.8%		
North Reading	76,962	5.5%	18.2%		
Topsfield	96,430	8.9%	26.6%		
Wilmington	70,652	2.3%	9.6%		

Source: Census 2000.

North Andover's highest-income age group consists of householders between 45-54 years of age, and its lowest-income households are the very young – people under 24 – and elderly households headed by persons over 75. These conditions are nearly universal, and they certainly apply to all towns in North Andover's region. However, householder age is only one of several factors that influence household income. Household type is also important. Families generally have higher incomes than non-family households and this applies to North Andover as well, but the difference is somewhat more pronounced. North Andover's median family income of \$91,105 is 1.25 times higher than the median household income, a ratio that slightly exceeds that of other communities nearby. In addition, non-family households (one-person households and households of unrelated individuals) usually have somewhat lower incomes in relation to the household median. Again, North Andover's experience is fairly typical: its median non-family household income is \$30,994, or 43% of the household median.

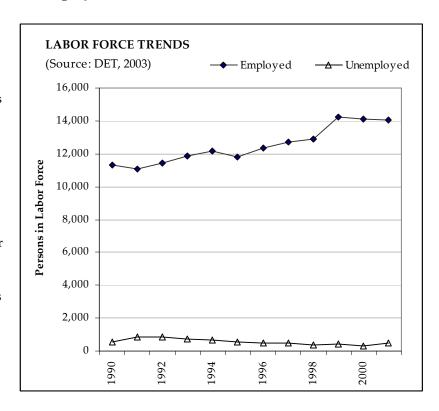
Approximately 2.9% of the town's population falls below the federal poverty standard. Among persons below poverty, 82% are below age 65 and 63% are in family households.⁵

⁵ Census 2000, Summary File 3, Tables P77, P80.

ECONOMIC CHARACTERISTICS

Labor Force, Education & Unemployment

North Andover's labor force has grown by 18% since 1995, from 12,371 to 14,572 people. The rate of growth in North Andover's labor force is a surrogate for the town's population growth, Over the past decade, North Andover experienced a significant increase in the percentage of persons over 25 holding undergraduate, graduate or professional degrees (50.3%). Overall, North Andover's adults are not as highly educated as their counterparts in Andover and Boxford, but the educational attainment of its labor force is different from that of the town's



total adult population. As more young families moved into North Andover between 1990-2000, they changed the demographic make-up of the town.

About 48% of North Andover's labor force is employed in occupations that require college or advanced training, e.g., management, education, medicine, architecture and engineering, and human services. The percentage of married women who work is lower in North Andover and Andover (55%) than in all communities nearby except Lawrence (43.6%), and this contributes to North Andover's somewhat lower percentage of persons over 16 in the labor force. Whether in family or non-family households, North Andover's women with full-time jobs earn more than women statewide, but their mean earnings are only 57% of the town's mean earnings by men, \$38,495 compared to \$66,793.6

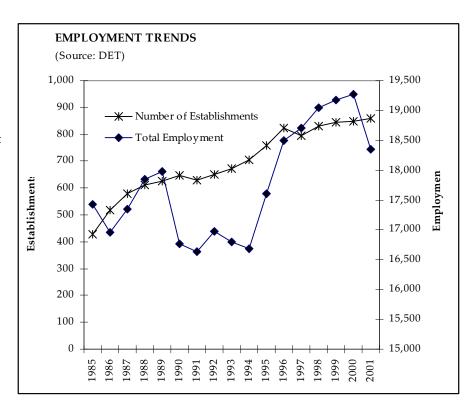
Despite the size of North Andover's employment base – 861 establishments and 18,343 jobs – less than one-fourth of its employed residents work locally and 43% commute more than 30 minutes to and from work. Of the town's commuters, 83% drive alone while only 8.5% use some form of public transportation, mainly commuter rail, on a daily basis. It is easy to see why. According to federal census data, a small percentage of North Andover's residents (10.4%) work in Boston or Cambridge, where inbound public transportation service is available to commuters. Most residents work in suburbs elsewhere in Essex County or in Middlesex County along I-93 or I-495.

⁶ Census 2000, Summary File 3, Tables P37, P50, DP-3, P85.

Employment & Wages

When the Planning Board adopted North Andover's first master plan (1957), manufacturing jobs comprised more than 95% of the town's total employment. A "company town" making the transition from textiles to technology, North Andover had recently attracted a new Western Electric Company plant on Osgood Street near Haverhill. Although North Andover aspired to be one of the region's top industrial centers, manufacturing employment gradually gave way to growth in other industries. During the 1990s, manufacturing employment declined by nearly 50% in North Andover. Manufacturing still exceeds other industries for total employment, but service jobs have become an increasingly prominent part of the town's economy. In 1990, North Andover had 3.55 manufacturing jobs for every service job; by 2001, the ratio had dropped to 1.43.8 Similar rates of decline have occurred throughout North Andover's region, yet some communities with a much smaller manufacturing base absorbed modest growth in manufacturing employment toward the end of the decade.

Since 2000, North Andover has lost an additional 3,000 manufacturing jobs because Lucent Technologies all but closed its Osgood Street complex: the plant originally built by Western Electric in the 1950s. Only three years ago, Lucent was still North Andover's largest employer, but by the time the company sold its Osgood Street property to local investors in 2003, the North Andover facility had scaled back to about 800 workers. North



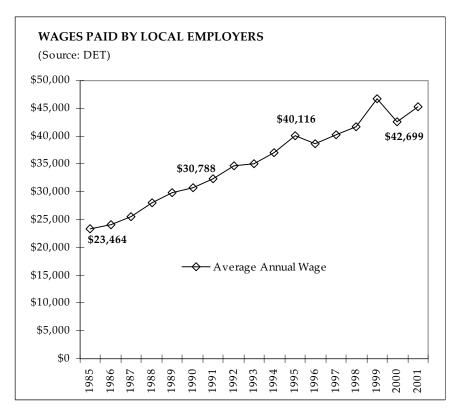
Andover's other significant manufacturing employers include A.E.G. Schneider, Sweetheart Cup, Watts Regulator and AEP Industries. Most of the town's manufacturing establishments are located in one of six industrial parks. In addition, North Andover has a considerable mix of small businesses. Retail shops, food establishments and service providers operate in several locations around town.

⁷ North Andover Master Plan (2000).

⁸ Massachusetts Department of Employment & Training (DET), "North Andover, 1985-2001," and North Andover ES-202 Employment 2002, 2003, generated by author using NAISC Data Retrieval System, http://www.detma.org.

Wages

In 2000, North Andover companies employed approximately 14,400 people and paid an average annual wage of \$42,600. Growth in wages and employment seem to run parallel to the growth in service industries between 1993 and 2000, in the Northeast region of Massachusetts. Over the past 15 years, North Andover and Andover have offered higher average annual wages than other municipalities in the Lawrence Labor



Market Area. North Andover has remained consistently over \$40,000 per year since 1997. The town is competitive in attracting a mix of business, industry and educational institutions that provide desirable jobs for a highly educated workforce.

Transportation & Commute

Interstate 495 runs through the northern corner of town, bringing access to the Lawrence Municipal Airport, industrial parks and residential areas. Route 114 crosses through the southern half of North Andover and offers connections to Routes 125 and 133. In North Andover, more people than ever are commuting to work by driving alone. Although commuting via public transportation has increased slightly, carpooling has declined. The average travel time to work of 28.8 minutes indicates that residents are working fairly close to home.

The MBTA does not have a commuter rail station in North Andover. The option for taking the train exists along the Haverhill/Reading line in Reading (113 parking spaces), North Wilmington (20 spaces), Ballardville (120 spaces), Andover (152 spaces) or Lawrence (163 spaces). North Andover is also a member of the Merrimack Valley Regional Transit Authority. In addition to regular bus routes that service in and around North Andover, the MVRTA provides special employment shuttles to the Lucent Technologies site that departs from Lawrence and Haverhill.

Workforce Development Opportunities

North Andover's region offers a number of educational programs for workers seeking to improve their employment skills. Locally, Merrimack College offers day and evening courses through its continuing education program. The program includes liberal arts, science and computer technology courses. Students may register without working toward a degree or they may matriculate into a certificate, associate's or bachelor's degree program. In addition, Northern Essex Community College (NECC) in Haverhill runs the Institute for Community and Workforce Development. The college makes it a priority to play a key role in the economic and workforce development of the region it serves. According to NECC's program literature, "The Institute's programs are designed to provide remedial classes, adult basic education, readiness for the General Equivalency Diploma exam, and more advanced community and leadership training." Finally, the Valley Works Career Center, with locations in Lawrence and Haverhill, is funded through the Workforce Investment Act. VWCC is an employment and career services agency for Merrimack Valley that offers a wide range of services to job seekers: resume development, career counseling, job matching, veterans' services, workshops and a Resource Room.

DEVELOPMENT TRENDS

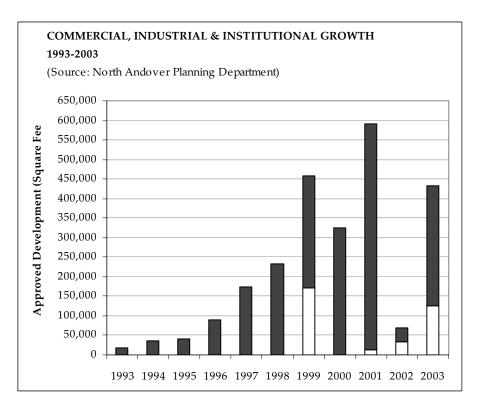
North Andover is a maturely developed community, but it still has a considerable amount of vacant, developable land, mainly for residential development. According to a buildout study prepared by Merrimack Valley Planning Commission for the Executive Office of Environmental Affairs' Community Preservation Initiative (2000), North Andover has enough developable land for about 2,300 new dwelling units and 8.37 million square feet (ft²) of commercial and industrial space. However, most of the non-residential land in MVPC's study is in parcels held by existing companies and is not currently available for development. Map 2 characterizes the town's existing land use pattern and many of its key amenities.

Housing is the most prevalent type of land use in North Andover. Since 1995, the town has issued building permits for more than 800 new single-family and multi-family dwellings. Like other suburbs, North Andover's housing inventory is comprised mainly of detached single-family homes. However, the town has an unusually large base of two-family, three-family, multi-family and condominium units. North Andover's housing profile reflects not only its industrial history but also its zoning, for local regulations encourage a considerable mix of moderate- to higher-density housing. The town also has several mixed-income housing developments, both rental and homeownership. Although North Andover's zoning has kept the town accessible to people of all ages and incomes, sales prices have steadily increased in the past 12 years from \$250,000 to more than \$400,000. This trend will most likely continue, for North Andover's experience mirrors that of the entire Eastern Massachusetts housing market.

North Andover officials have issued permits for more than 2 million ft2 of new, non-residential development. About 16% of all recent non-residential activity represents municipal and institutional uses that contribute to the local economy but do not directly increase the tax base, such as new dormitory and academic buildings at Merrimack College and the construction of Foster Farm Elementary School. Many of North Andover's new commercial projects are fairly

⁹ The North Andover Master Plan's residential buildout estimate is 3,800 new dwelling units, based on 1997 conditions. The Master Plan does not provide a detailed forecast of future commercial and industrial development.

small, as would be expected given the limited supply of vacant, businesszoned land. However, there have been major investments in large retail and office developments, including the Eaglewood Retail Plaza (2003). Investments in new or expanded industrial space accelerated toward the end of the 1990s, with projects ranging from 10,000-55,000 ft². In addition, the



development of surplus land at Lawrence Municipal Airport – one of North Andover's long-sought objectives – has begun to materialize with permits and approvals for the North Andover Business Park.

COMMUNITY VALUES

North Andover residents take great pride in their public schools. In FY 2002, North Andover invested more than \$27 million in K-12 programs, not including debt service for school construction projects. The town's total general fund expenditures exceeded \$53 million, making education spending more than half of all expenditures. Approximately 60% of all general fund revenue is from the tax levy, 84% of which is comprised of residential taxes and 16%, commercial, industrial and personal property taxes. The town's average single-family tax bill ranks 40^{th} in the Commonwealth.

1. LUCENT TECHNOLOGIES/1600 OSGOOD STREET

Originally owned by Western Electric, the Lucent Technologies Merrimack Valley Works plant at 1600 Osgood Street is a distinguished, impressive compound that has defined the image of North Andover's northernmost industrial area since the mid-1950s. The site consists of 169 acres, including 40 acres on the south side that have never been developed. In addition to nearly 2 million square feet (ft2) of manufacturing, office and warehouse space in 30 permanent and temporary buildings, the property includes 40 acres of roadways



Former Lucent Technologies Merrimack Valley Works 1600 Osgood Street, North Andover (Ozzy Properties Photo)

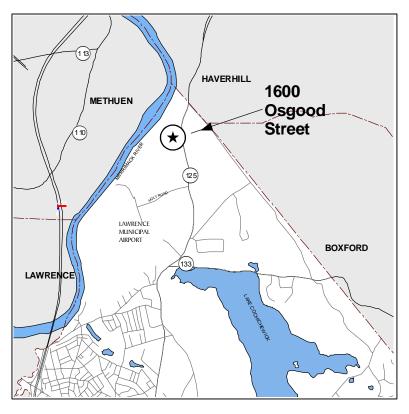
and parking, 6,000 parking spaces and four little league ball fields. The centerpiece of the site is its 1.5 million ft² manufacturing facility.

Western Electric built the North Andover plant between 1954-1956. The company's arrival marked a significant turning point in North Andover's economy, for while much of the region was suffering from the decline in textiles manufacturing, Western Electric made North Andover into a new kind of "company town." For three decades, Western Electric employed 10,000-12,000 people in North Andover. The property eventually transferred from Western Electric to AT&T, and in 1996, AT&T sold the property to Lucent for \$45 million. Toward the end of the 1990s, Lucent Technologies began to downsize, gradually laying off and relocating employees in North Andover and at other U.S. facilities. The layoffs, buyouts and early retirement packages intensified, and in mid-2001 Lucent reduced its payroll by nearly 900 jobs.

Last year, 1600 Osgood Street, LLC – the Andover-based Ozzy Properties, Inc. – purchased the site for approximately \$13.86 million with the goal of attracting high-tech/high-end industrial tenants. Today, the property is almost entirely vacant, with only a few hundred remaining Lucent Technologies employees filling its halls. The town and the people still employed there remain uncertain about the property's future. For both North Andover and the region, the stakes are obviously high. For the new owners, however, the risks are enormous: dividing 1.5 million ft² of single-user manufacturing space for multiple-tenant occupancy is daunting at best, and it is made far more challenging by the precarious state of the nation's economy. Local, state and federal resources will have a major impact on the successful redevelopment of this property, for it is hardly the only industrial space available in Eastern Massachusetts. While the Lucent site

has economic, psychological and social significance to its present and former workforce and residents of North Andover, it is a massive plant that was designed and built to meet the industry-specific needs of one company.

1600 Osgood Street is served by public water and sewer, Essex County Gas Company, and Massachusetts Electric. Both freight and passenger trains run on the tracks behind the site, beyond which is the Merrimack River. Interstate 495 is only five minutes away via Route 125, the Ward Hill Connector and interchange 48 to the north, but access to the site from the regional highway system is not optimal, especially for tenants requiring oversized trucks and



frequent deliveries. One commercial real estate services firm said recently that "the plant is somewhat off the beaten path." Although the access routes to and from I-495 south are not ideal, it is important to remember that Lucent Technologies was the destination point for 12,000 commuters not so long ago. Transportation routes alone should not be an insurmountable barrier to redevelopment.

Ozzy Properties purchased 1600 Osgood Street anticipating that the extensive space and Lucent's recent investment of \$75 million in facility improvements would make the site appealing to highend manufacturing establishments and thereby lure another large tenant. The staying power to be selective about the right "first tenant" will be crucial to the long-term reinvention of this property. Not surprisingly, many of the earliest inquiries have come from lower-end industrial firms. While Ozzy Properties has to remain open about potential tenants, they know that the initial leases could have a significant impact on their ability to market the property to quality tenants in the future. The issues are not only tenant compatibility and image, but also the sheer number of permutations involved in dividing such a large space.

Currently, Ozzy Properties is focusing on biotechnology companies that are in the early stages of product development and will need production space in the near future. In addition, the owner wants to maintain the existing "campus" setting, adding some landscaping and modest site improvements in the short run. Ozzy Properties has designed new entrances at the north and south walls, handicapped accessible entrances and elevators, campus improvements to soften the appearance, common atrium space and breezeways, connections from the office building to

¹⁰ Ethan Forman, "A New Beginning," <u>Eagle Tribute</u>, 12 October 2003.

manufacturing floor for contiguous corporate layouts, and new loading docks and shipping/receiving areas.¹¹

Lease rates are estimated to be comparable to the rest of the region at approximately \$6-\$7 per square foot. ¹² For research and development firms occupying industrial buildings, the average rental rate is between \$7-\$9 per square foot. Should Ozzy Properties consider more office users for the facility, they may be able to charge higher rents, e.g., \$14-\$19 per square foot. However, office vacancy rates are very high throughout Eastern Massachusetts and rents have dropped significantly. Under current conditions, competing for office tenants is very difficult. ¹³ In 2003, Haverhill voted to extend its Economic Target Area (ETA) designation, which offers a 5% investment tax credit, to include the Lucent Technologies site. North Andover has also approved a tax increment financing (TIF) agreement and the state legislature approved an additional economic stimulus package for the site. ¹⁴

REGION

North Andover is one of 15 communities in the Merrimack Valley Planning Commission's (MVPC) regional planning district. According to MVPC, industrial growth in the Merrimack Valley area can be attributed in part to:

- Growth in the area due to proximity to Boston and its higher educational institutions.
- The nearly full development of the Route 128 belt.
- A well educated workforce.
- Availability of reasonably priced industrial land along I-495.
- Easily accessible local transportation networks including I-93, I-95, I-495 and a conveniently located international airport.¹⁵

All of these factors have fueled new development in industrial zones or rehabilitation and reuse of older structures. Under existing conditions in the I-495 real estate market, notably commercial and industrial vacancies, many are concerned that the region is vulnerable to a protracted economic downtown. For example, the MetroWest region is at a 21.3% vacancy rate, up from 9.9% in the third quarter of 2001. In the past 12 months, communities in the I-495 north area have experienced an increase in vacancy rates from 15.6% to 25.3% and communities in the I-495 west area, 18.6% to 29.2%. The only subregion with slightly improved market conditions is I-495

¹³ Mitch Jacoby, CRESA Partners, 29 October, 2003.

¹¹ Ozzy Properties, Inc., "1600 Osgood Street," http://www.ozzyproperties.com/, 1 June 2004.

¹² Forman, "A New Beginning."

¹⁴ Merrimack Valley Economic Development Council, "Annual Report 2003,"
http://www.mvcouncil.com, 25 May 2004.

¹⁵ Merrimack Valley Planning Commission, "Industrial Site Inventory," 24 October 2003.

south.¹⁶ An anticipated, modest recovery in the next 12-15 months will most likely result in the best buildings in the best locations being sought first along Route 128. As a result, the I-495 north market will most likely remain weak for a longer period.

North Andover has advantages that other areas of Massachusetts do not, however. First, North Andover's region has a comparatively strong track record in manufacturing. It is the state's only region that experienced manufacturing job growth between 1993-2000: an increase of 5%. Since the Merrimack Valley area has traditionally been able to maintain manufacturing and high-end industries, North Andover and other communities nearby offer a skilled, educated workforce to prospective employers. This should give Ozzy Properties a marketing edge over other commercial developers looking to fill vacant industrial space. A second advantage is the town itself. North Andover is a great town with excellent public schools, a wide range of homes – including more than 500 recently permitted units in mixed-income developments – and cultural and open space amenities that will be very attractive to decision-makers in companies that are in a "move-up" or expansion mode.

Unfortunately, many businesses in Massachusetts are <u>not</u> in an expansion mode. Rather, they are in a survival mode. Companies have downsized and some have had very high layoff rates. Since the early 1990s, the most notable shift in North Andover's region is a clear transition toward services and away from manufacturing. Although the high-profile presence of manufacturing has declined, it remains critically important to the town, the region and the state. Manufacturing provides 20.8% of the northeast region's total employment and manufacturing exceeds most other industries for the competitiveness of its wages.¹⁸

REDEVELOPMENT OF LARGE SINGLE-USER FACILITIES

Ozzy Properties is hardly the first developer to purchase a once thriving, single-user facility with the intent of dividing and leasing space to multiple tenants. Wang Towers in Lowell, the Framingham General Motors assembly plant, the South Lowell Raytheon plant and Lucent Technologies' plant in Lee's Summit, Missouri, shed light on some of the issues involved with successfully redeveloping single-user properties.

Wang Towers. In 1994, the Wang Towers property was sold at auction for \$525,000 to a private developer who promised to recruit new tenants and bring in new business to Lowell. Along with financing deals from the city, the developer set out to make his new investment work. The towers, built in the late 1970s for \$60 million, consist of approximately 1.5 million ft² of office space. Renamed Cross Point Towers, the site offers low rental rates, day care facilities, fiber optic wiring, a fitness center and numerous conference rooms, elevator service and easily adaptable floor space. As of November 1999, Cross Point Towers, the largest single office building outside of Boston, had cemented its success with the attraction of big-name companies such as IBM, Cisco Systems, Eastman Kodak, Metropolitan Life, Chase Manhattan and AT&T.

_

¹⁶ Banker & Tradesman, "Office Vacancies, Concerns Rise in I-495 and MetroWest Markets," 24 October 2003.

¹⁷ Robert Halpin, Merrimack Valley Economic Development Council, 29 October 2003.

¹⁸ Massachusetts Office of Economic Development, Towards a New Prosperity, 2002.

¹⁹"Sale of Wang Towers Complete," The Lowell Sun, 21 March, 1994.

Today, the three buildings are 80-85% occupied and are expected to reserve the remaining floor area as expansion space for existing tenants. The success of this venture reinforces that converting a single-user facility for multi-tenant occupancy <u>is</u> possible. However, the redevelopment and leasing of Wang Towers occurred over a five-year period when the market was much stronger than it is today.

General Motors. Framingham's General Motors assembly plant, with 2.9 million ft² of manufacturing space and 4,000 employees, closed its doors in 1991. Framingham lost another major employer, Prime Computing, at about the same time. At one point, Framingham and neighboring Natick had commercial and industrial vacancy rates near 50%.²⁰ While the economic outlook was poor, local officials decided to engage in some thoughtful, long-range planning and a search for the right buyer. Both the town and General Motors contacted buyers on their own, and the town worked to create incentive packages such as a tax increment financing (TIF) plan. Ultimately, the property was purchased for \$8.9 million by ADESA Corporation for an auto auction facility. The new wages were not in the \$20/hour range that General Motors had paid, but ADESA did offer 250 full-time positions and 100 part-time jobs.²¹ If the goal of redevelopment is to retain jobs and tax revenue, the Framingham General Motors reuse project is a success story. Still, there are mixed feelings in Framingham about whether ADESA Corporation is as valuable as General Motors was to the community as a whole.

Raytheon-South Lowell Plant. Once a thriving missile production plant, Raytheon's South Lowell facility closed and was offered for sale in 1996. It includes 600,000 ft² of space and 130 acres of land.²² Less than a quarter mile away is an I-495 interchange that offers direct access to the site.²³ The property was purchased by private developer Don Levine, who renovated the entire building. Jabil Circuits, a Florida-based company that was lured by incentives to open a branch in Massachusetts, occupies half the site and is Levine's main tenant. The other tenants include Solitec, Nortel and smaller manufacturing and assembly companies. The South Lowell Raytheon project required cooperation from three communities — Lowell, Billerica and Tewksbury — and they perceive the development as a successful venture to preserve viable industrial space and jobs for the region.

Lucent-Missouri. In 1997, Townsend Capital LLC purchased the defunct Lucent Technologies plant in Lee's Summit, Missouri. The facility was built in 1961 about fifteen miles southeast of Kansas City. It includes a 332-acre site with about 1 million ft² of manufacturing space and is located less than one-quarter of a mile from Interstate 470, the outer belt highway surrounding Kansas City. The former Lucent-Missouri plant has three existing buildings with 173,092 ft² of actual and potential clean room space for sensitive manufacturing operations.²⁴ It also has its own power, steam and wastewater treatment plants, truck loading docks, a railroad spur and

²⁰ Andy Murray, "Filling the Void," <u>The Lawrence Eagle Tribune</u>, 16 December 2001.

²¹ Charles M. Sennott, "Blue-Collar Tradition Sold to the Highest Bidder," <u>The Boston Globe</u>, 20 July 1997.

²² Richard Scanlon, Billerica Town Assessor, 30 October 2003.

²³ Union Capital Investments, "Riverview Commerce Center – Tewksbury, MA," http://www.ucillc.com/>, 30 October 2003.

²⁴ Townsend Capital LLC, "Property Information," http://www.townsendcapital.com/, 25 May 2004.

5,500 parking spaces. In 1999, the plant was renamed "Summit Technology Campus," and marketed as a high-tech manufacturing center. To date, the Summit Technology Campus has attracted AT&T, LabOne Inc., Perfect Commerce Inc. and the U.S. Bureau of Citizenship Services as long-term tenants. Townsend Capital LLC lists the campus as being 48% vacant, and the developer is currently spending \$3 million to convert the campus into back office and data/call center space. One of the buildings has already been totally gutted and retrofitted, and another will be demolished. Over 175 acres of vacant land remain available for additional development.

POTENTIAL REUSE OPTIONS

There are several reuse possibilities for 1600 Osgood Street, but for every possibility there are numerous challenges to realizing them. During its last five years of occupancy, Lucent Technologies spent nearly \$75 million on technology and system upgrades, yet the facility's massive size and the state's weak market for office and industrial space complicate the prospects of marketing and leasing up this property. From a regional economic development perspective, the most viable options will probably be biotechnology/biopharmaceutical and medical supply R&D, manufacturing – both high- and low-end – and transportation and warehousing. However, the region itself has some formidable, internal competition for the same kinds of businesses.

There are 300+ biotechnology/biopharmaceutical companies in Massachusetts and many are in the drug development stage. Should they continue to move forward into production, 1600 Osgood Street offers ideal space for their needs. Massachusetts is also home to numerous medical device manufacturers. The amenities and technology features at 1600 Osgood Street would be a distinct advantage to these firms. For Ozzy Properties, the challenge will be to lure them away from well-established biotechnology centers in Burlington, Cambridge and Lexington. However, the educated and plentiful labor supply in North Andover's area, the site's relatively easy access and amenities, and the town's positive stance toward redevelopment should help to increase the site's attractiveness.

In addition, the site's proximity to a small airport, major passenger and freight rail lines, and two interstate highways (I-93 & I-495) offer the potential to attract shipping, trade, transportation, and warehousing tenants. Lawrence Municipal Airport, less than one-quarter mile from 1600 Osgood Street, is one of only three airports in the state with both a control tower and a runway longer than 5,000 feet. According to Mike Miller, the airport manager, it has the potential to support increased commercial freight and passenger service and can currently support small jet landings. The main rail line connecting all points northeast, south, and west runs along the Merrimack River directly behind 1600 Osgood Street. About eight freight trains operated by Guilford Rail System and 14 Amtrak and the Massachusetts Bay Transportation Authority passenger trains pass the site every weekday. Interstate 495 is approximately 3-5 minutes to the north, via the Ward Hill Connector and interchange 48. Interstate 495 connects directly to I-90 to western Massachusetts and New York, I-93 to Boston, and I-95 to Connecticut, Maine and Rhode Island, while Route 213 to the south also connects with I-93 to New Hampshire. A concentrated

²⁵ "Summit Technology campus should be ready by midyear," <u>The Business Journal</u>,15 January 2004.

²⁶ Mark E. Vogler, "Lawrence need not repeat Fall River's fate," <u>The Lawrence Eagle Tribune</u>, 3 December 2000.

²⁷ Michael Miller, Manager, Lawrence Municipal Airport, 28 May 2004.

supply of households, labor and businesses are within easy reach of North Andover, making the location potentially suitable for a regional distribution facility.

The Reviviendo Gateway project, a collection of mill buildings totaling 1.2 million ft² that are being redeveloped across the Merrimack River in Lawrence, could dramatically inflate the supply of office and high-end manufacturing space in the area and pose stiff competition for Lucent's former plant.² Lawrence's project includes reconstruction of the Marston Street interchange to provide direct, easy access to and from I-495, and the construction of an inter-modal transit facility to the south. According to the Merrimack Valley Economic Development Council, MassDevelopment — developer of the site — has not yet released a marketing plan for the space.² MassDevelopment's presence in Lawrence could be an asset or a significant liability for Ozzy Properties. On one hand, building the state's economy with favorable financing for new, emergent and expanding companies has been MassDevelopment's primary mission for more than a decade. On the other hand, when MassDevelopment acts as both developer and quasipublic lender, its access to financial and political capital gives the agency enormous competitive advantages over private developers.

The Lawrence Airport Commission owns land that will be developed as a business park adjacent to the airfield in North Andover – a direct result of North Andover's own efforts to free up airport property for new business growth. ³⁰ According to airport officials, the park has received all necessary permits and approvals from the town, and the development is expected to commence within the next few months. ³¹ However, the Federal Aviation Administration must first approve disposition of the land and the commission has not yet finalized a marketing plan for the parcels.

These projects offer the potential for cooperative marketing and packaging of area sites and amenities. A strategic campaign with amenity packages offering sewer, power, communications, rail transit, air transportation, and tax incentives to target complimentary businesses, could build the necessary mass for a sustainable business community in North Andover's area. Without this kind of cooperation, it is highly possible that potential tenants will exploit the glut of new space, the result being deflated rental rates across the board. A coordinated and strategic plan for marketing and leasing space in all three developments, improved inter-site transportation including new access roads between the airport and 1600 Osgood Street, and the sharing of resources such as utilities, transportation, warehousing, etc., could yield tremendous economic benefits for the individual property owners and the entire region.

_

²⁸ "Lawrence Gateway Project," http://www.mass.gov/eotc>, 01 June 2004.

²⁹ Robert Halpin, Merrimack Valley Economic Development Council, 1 June 2004.

³⁰ Under Chapter 57 of the Acts of 2000, the Lawrence Municipal Airport Enterprise Commission has authority to acquire, develop and dispose of surplus land at the airport. The Enterprise Commission's unusual powers include levying and collecting taxes on parcels sold to private interests, just as a city or town levies taxes on real and personal property. However, the Enterprise Commission will not be a municipal service provider and it will not retain the tax revenue it collects. Instead, its job is to disperse the revenue to Lawrence and Andover under a formula approved by the legislature and the Department of Revenue.

³¹ Michael Miller, 28 May 2004.

Eco-industrial development should also be investigated. Eco-industrial parks benefit tenants by encouraging clusters that integrate suppliers and users. In this case, it may make sense to coordinate with both the Reviviendo Gateway developer and the Lawrence Airport Commission. For North Andover, the main benefit of encouraging an eco-industrial park would be higher probability of sustainable economic development: the clustering of customized, interdependent tenants decreases the likelihood that they will relocate operations in the future. However, designing a workable eco-industrial park is challenging and time-consuming, and it requires considerable staying power on the part of any developer. The key is the location of an anchor tenant and designing the facility around that tenant's material, transportation and energy needs. As a part of the design, it would be essential to streamline the introduction of new tenants and producers.³²

Shipping, trade, transportation and warehousing businesses could take advantage of the multimodal options available at 1600 Osgood Street. Improved connections to I-495 southbound via a new bypass road along the riverfront or improved connections to the Ward Hill Connector to the north would significantly improve the marketability of this site. These improvements may be more economically feasible if done in cooperation with the airport commission. There is continuing talk of relocating the existing Bradford commuter rail station and there may be an opportunity to build a new station on the Lucent property. These kinds of access improvements would undoubtedly improve the site's desirability and viability while limiting traffic impacts on North Andover.

Coordinated, transit-oriented land use planning for the area surrounding any proposed rail station would allow developers to best exploit the improved access and provide an accessible ridership pool in the station's service area. A station at 1600 Osgood Street may not serve existing commuters traveling to Boston because access from I-495 and I-93 south would be poor, as would access from residential areas in North Andover and Haverhill. More likely, the success of any station here would depend on reverse-commuters headed to jobs in the immediate area or new residents of neighborhoods nearby.

³² "Eco-Industrial Parks, A Timely Idea," http://home.gwi.net>, 20 October 2003.

2. ZONING REVIEW

Approximately 10% of North Andover's total area is zoned for commercial and industrial development. The town has divided its commercial and industrial land into numerous districts,

some of which are quite small. When the North Andover Master Plan was completed four years ago, local officials estimated that the town had only 161 acres of vacant, developable or partially developable land available in business and industrial districts. Concerned about the fiscal impacts of rapid residential growth, the Master Plan Committee endorsed one of the major goals of North Andover's Strategic Planning Committee (1997): to restore non-residential assessed values to 20% of the town's total assessed valuation and hold residential values to a maximum of 80%.

Since the town had so little vacant, developable land left for new industrial growth, the Master Plan Committee argued for decommissioning the Lawrence Municipal Airport and marketing the land for new development. The Committee said

Business & Industrial Zones						
Zoning District	Acres					
Business 1	16.0					
Business 2	10.8					
Business 3	30.5					
Business 4	59.4					
General Business	136.1					
Village Commercial	73.3					
Industrial 1	309.2					
Industrial 2	918.3					
Industrial 3	100.5					
Industrial S	<u>136.9</u>					
Total	1,790.9					

that at the very least, town leaders should press for an agreement with Lawrence that would put 52 acres of the airport property back on North Andover's tax rolls. According to estimates released by the planning department, the 52 acres would support about 304,250 square feet (ft²) of industrial development, or an average of 5,850 ft² per acre. In retrospect, what is remarkable about the town's sense of urgency over the airport property is the very low density of development anticipated by the proponents.

The Master Plan also notes that as of the late 1990s, the average amount of industrial development per acre in North Andover was 6,160-9,800 ft². Translated: the average floor area ratio for industrial uses ranged from .141-.225. The following analysis explores the relatively low intensity of use in North Andover's industrial zones as an indicator of zoning barriers to high-value development.

INDUSTRIAL DISTRICTS

Most of North Andover's industrial land is located in the northern end of town, generally between Sutton Street-Osgood Street (Route 125) and the Merrimack River (Map 3). Nearby, there are smaller, industrially zoned pockets between Sutton and Belmont Streets, and between the railroad, Water Street and Walker Road. The remaining industrial land is located in two areas along Route 114: south of the intersection of Routes 125-114, and at the Middleton town line.

Until the late 1980s, most of Route 114 was also zoned for industrial use. In 1985, North Andover discovered giardia in Lake Cochichewick, the town's largest water body and primary drinking water supply. The town developed a watershed management plan and changed the zoning throughout the watershed by doubling the minimum lot area requirement from 40,000 to 80,000 square feet (ft²). At the time, communities across the Commonwealth were highly conscious of so-called "snob zoning," in part because the state was actively enforcing a 1982 executive order that directed agencies to withhold grants from towns with zoning barriers to new housing growth.33 When North Andover "down-zoned" land to protect Lake Cochichewick, it also rezoned about 450 acres in the southern end of town and created two new districts: Village Commercial and Village Residential. In doing so, North Andover hoped to create a village node in an area that was beginning to grow, and simultaneously protect its decision to reduce future development in the Lake Cochichewick watershed. The town also hoped that developers would pay to extend sewer service southward on Route 114. Toward that end, North Andover inserted an "adequate facilities" policy in the Village Residential bylaw and pledged higher-density development rights to projects that connected to the municipal sewer system. While the town gained an opportunity to provide new neighborhoods with a mix of homes, it also lost 325 acres of industrially zoned land.

Data supplied by the assessor's office suggest that today, there are very few vacant developable parcels in any of North Andover's four industrial zones. The town has about 91 acres of vacant industrial land with some use potential,³⁴ mainly in the Industrial-1 (I-1) and I-2 districts. Since the parcels are not always contiguous and many are small, estimating buildout capacity by applying the town's dimensional regulations to 91 acres would distort the actual development yield of the land. However, applying the town's dimensional and intensity standards to the few larger vacant parcels suggests that zoning itself may act as a barrier to high-value development in North Andover's industrial districts.

Table 4: Summary of Industrial District Dimensional and Intensity Regulations

1 110 10 11 0 1111111111111111111111111	Industrial 1	Industrial 2	Industrial 3	Industrial S
Lot Area	80,000	80,000	435,600	50,000
Height	55	55	55	55
Frontage	150	150	150	150
Front Setback	50	50	100	30
Side Setback	50	50	200	20
Rear Setback	50	50	200	50
Floor Area Ratio	0.500	0.500	0.500	0.500
Building Coverage	35%	35%	35%	35%
Open Space				

Source: North Andover Zoning Bylaw, Table 2.

³³ Executive Order 215.

³⁴ North Andover Assessor's Office, Fiscal Year (FY) 2003 Parcel Database, CD-ROM. The data set received from the town appears to be missing parcels in several use codes, so the 91-acre estimate may be too low. It is

Except for Industrial-S (I-S), located at the periphery of the downtown area and to the north adjacent to Haverhill, North Andover's industrial districts limit all uses to fairly large lots. The front, side and rear setbacks for I-1, -2 and -S are conventional, but the setback requirements for development in the I-3 zone are onerous and they effectively place large amounts of land in uneconomic use. While the maximum height for industrial district buildings is reasonable, the building coverage limit of 35% is low. The more disconcerting issues involve North Andover's unusually low maximum floor area ratio of .50 in all zones, and parking. In addition to the I-S setbacks, a floor area ratio of .50 and sizeable off-street parking requirements place significant constraints on the amount of development that North Andover's industrial land can accommodate. On a per-acre basis, the town has capped the development yield of its existing industrial zones. These issues should be addressed before North Andover considers rezoning additional land for industrial uses.

Although I-1 and I-2 are governed by the same dimensional requirements, they are subject to different use regulations. In some cases, the uses seem to have been crafted for particular sites. This applies to all of the industrial zones, especially to I-3. Table 5 provides a synopsis of North Andover's industrial district use regulations. The regulations raise several issues, notably:

- North Andover's Zoning Bylaw does not classify uses by use groupings, and the uses are not clearly defined. This applies to the entire bylaw, not only the industrial zones, but it is particularly obvious because as written, the industrial uses are quite broad.
- The town allows day care centers by special permit, but G.L. c.40A, Section 3, explicitly prohibits communities from requiring a special permit for this use.
- Agriculture on parcels of less than five acres (that is, non-exempt agriculture) is a permitted
 use in all industrial zones. The town may want to reconsider the wisdom of encouraging
 non-exempt agricultural uses on industrial land.
- Restaurants and food service establishments are permitted only as accessory uses, except in the I-S District where they are allowed on a limited basis by special permit. Presumably, the bylaw intends to limit food service establishments to uses such as employee cafeterias in a manufacturing facility. In many communities, restaurant uses are often a permitted use in one or more industrial districts as part of a limited complement of non-industrial uses. Given the location of I-S (near the downtown), it would make sense to reclassify restaurants as a permitted use, even if confined to "lunchroom" or limited-seating restaurants.
- Retail is permitted only as an accessory use, and the bylaw limits the total of all accessory uses (which may include restaurants) to a maximum of 10% of a facility's gross floor area (GFA). It is not clear whether these accessory restrictions apply to retail sale of goods sold primarily at wholesale on the premises.
- Research and development (R&D) facilities are permitted in all zones. Although the town
 may want to attract R&D establishments because they are usually high-value uses, from an
 economic development perspective it is best to offer R&D an industrial zone that is fairly
 specialized. A separation from "heavy" industrial, trucking and distribution uses may make
 North Andover's industrial property more attractive to the kinds of facilities the town wants
 to encourage.

Table 5: Summary of Industrial District Use Regulations³⁵

Use	I-1	I-2	I-3	I-S
Art gallery or museum.	Y	Y	Y	
Automobile or other motor vehicle repair.		Y		
Automobile service station.		Y		SP
Bus garage		Y		Y
Business, professional and other offices.	Y	Y	Y	Y
Car wash.		Y		
Day care center.	SP	SP	SP	SP
Agriculture.	Y	Y	Y	Y
Golf course.	Y	Y	Y	
Hotels and motels		Y		
Light manufacturing.	Y	Y	Y	Y
Lumber, building materials storage or sales, fuel		Y		Y
storage or contractor's yard.				
Medical center, clinic, or medical laboratory.	Y	Y	Y	
Educational use.	Y	Y	Y	Y
Parking, other accessory uses customarily	Y	Y	Y	
associated with permitted uses.				
Place of worship.	Y	Y	Y	Y
Bank, post office, telephone exchange or telephone				Y
business office, local bus passenger station				
Printing and reproduction.	Y	Y	Y	Y
Public service corporations.	Y	Y	Y	Y
Public buildings.			Y	
Public garages and accessory buildings.			Y	
Public sanitary disposal site.			Y	
Public storage of equipment.			Y	
Research and development facilities.	Y	Y	Y	Y
Restaurant or diner.				SP
Retail food store.				SP
Accessory retail and food uses.	Y	Y	Y	
Swimming or tennis clubs, indoor ice skating rinks.	SP	SP	SP	
Veterinary hospitals and kennels.		Y		
Accessory warehousing and wholesaling.	Y	Y	Y	Y

Source: North Andover Zoning Bylaw (2002), 49-54. "Y" means permitted, "SP" means special permitted.

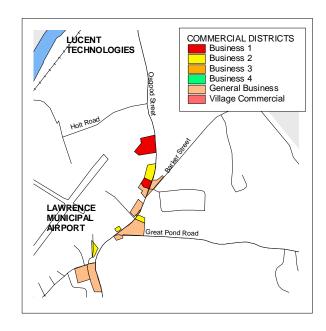
³⁵ Use descriptions have been condensed and listed alphabetically for table presentation. In some cases the Zoning Bylaw imposes additional restrictions or requirements not listed above.

COMMERCIAL DISTRICTS

The Village Commercial District is the second largest of six business districts. Together, they include 326 acres of land. There are at least two noteworthy features of North Andover's

commercial zones: first, the districts are scattered broadly across town, often in isolated pockets, and second, they are randomly mixed. A good example is the commercial area on Osgood Street/Route 125 south of Holt Road, where several parcels are zoned for commercial use, each in a different commercial district.

According to the North Andover Master Plan, 20 of the town's then-existing 161 acres of vacant, non-residential land were located in commercial zones. As a result, North Andover's commercial districts appeared to be all but "built-out," i.e., developed to their maximum capacity under current zoning. Since 1997 when the land use analysis was prepared for the Master Plan, vacant commercial land has declined to about 12



acres. 36 Table 6 summarizes the town's dimensional and use intensity regulations for commercial development.

Table 6: Summary of Business District Dimensional and Intensity Regulations

Requirement	Business 1	Business 2	Business 3	Business 4	Village	General
					Commercial	Business
Lot Area	25,000	25,000	120,000	80,000	90,000	25,000
Height	35	35	35	60	40	45
Frontage	125	125	300	200	200	125
Front Setback	30	25	100	50	50	25
Side Setback	20	25	50	50	25	25
Rear Setback	30	30	50	50	25	35
Floor Area Ratio	0.30	0.75	0.40	0.50	N/A	N/A
Building Coverage	30%	35%	30%	25%	25%	35%
Open Space					25%	

Source: North Andover Zoning Bylaw, Table 2.

As with the industrial districts, North Andover's business district regulations tend to favor a fairly low intensity of use. The Zoning Bylaw anticipates somewhat more variety in business district form, for the small minimum lot size for Business-1 (B-1), B-2 and General Business (GB) differ quite a bit from the larger lot standards for B-3, B-4 and Village Commercial (VC). Given the location of each district, the side and rear setback requirements seem appropriate, but like

³⁶ North Andover Assessor's Office, "FY 2003 Parcel Records Database."

most communities, North Andover has no <u>maximum</u> front yard setback. As a result, many of its commercial areas outside of downtown are visually and operationally dominated by parking lots. The aesthetic impact of large parking areas is partially attributable to their proximity to the road and partially to North Andover's off-street parking regulations, which impose "high-side" parking requirements on commercial (and industrial) uses. This is a common problem in many communities, and it stems from industry standards that equate minimum parking needs with maximum-demand conditions, e.g., the number of cars a shopping center might attract right before Christmas. Today, national and regional chain stores often propose very large parking lots even in zones with reasonable parking standards because they want to convey the impression of adequate, convenient parking to people driving by their establishments.

Another similarity between the commercial and industrial districts is the low floor area ratio that North Andover assigns to four of its business zones. There is no FAR standard in the VC and GB Districts, but B-1, B-3 and B-4 impose fairly low caps on commercial development. The standard for B-2, .75, more closely approximates an intensity of use that can generate high-value commercial development on a per-acre basis, but the B-2 District applies to small, unconnected parcels in only a few areas of North Andover, primarily on Osgood Street. Even though higher-density commercial development is attainable on lots in the B-2 District, North Andover's parking requirements reduce the feasibility of developing a B-2 site with a structure that meets the building coverage, height and FAR regulations. For example, a retail establishment at the maximum FAR on a conforming lot in the B-2 District would require about 94 parking spaces, 9' x 18' each. To achieve the maximum FAR, the structure would have to take advantage of the maximum building coverage of (35%) because the height limit for the district is 35 feet. After deducting the total area consumed by the building footprint (coverage) and 94 parking spaces, a 25,000 ft² lot would be left with slightly more than 1,000 ft² of area, with no provision for driveways, landscaping and pedestrian walkways.

Despite minor dimensional and density differences between B-1 and B-2, the permitted uses in these zones are not the same (see Table 7). Considering allowed and special permitted uses in all six districts, B-1 is more like B-4 than the other zones while B-2, B-3, VC and GB are functionally similar. It is clear from the zoning map and discussions with local officials that many parcels in North Andover's commercial districts are the product of incremental rezoning, such as changes initiated by citizen petition. Downtown North Andover has the traits of "pre-zoning" commercial centers, including its mix of uses, the close proximity of the building line to the street, and a density that is more urban than any other business area in town. In contrast, the VC District is obviously a <u>planned</u> district: its location, shape, and dimensional and density regulations, which encourage larger parcels, fewer curb cuts and three-story buildings, all point to contemporary suburban planning standards. The most obvious sign of suburban land use controls is North Andover's approach to front setbacks. Even VC imposes a substantial front yard requirement of 50 feet – a setback that hardly encourages "village" design.

Providing multiple commercial districts makes sense when a community wants to achieve a particular shape as it continues to develop. Promoting village centers is a classic example of a shaping objective that calls for thoughtfully conceived use and dimensional regulations tailored to the center's location and size, and the character of the area that surrounds it. Multiple commercial districts without clear planning objectives, such as the seemingly random placement of B-4 zoning along Route 114, the broadly dispersed GB zones, and pockets of B-2 zoning created on a site-by-site basis, do not achieve coherent planning outcomes.

Table 7: Summary of Commercial District Use Regulations

Table 7: Summary of Commercial District Use Regulations								
Use	B-1	B-2	B-3	B-4	VC	GB		
Accessory restaurant, food services.	Y			Y				
Agriculture.	Y	Y	Y	Y	Y	Y		
Art Gallery.	Y	Y	Y	Y				
Auto repair, body shop						Y		
Automobile service station.		Y	Y			Y		
Day care center.	SP	SP	SP	SP	SP	SP		
Educational use.	Y	Y	Y	Y				
Funeral parlor.			Y			Y		
Hall, club, theater, other place of					Y	Y		
amusement of assembly.								
Hotel				Y				
Indoor amusement, assembly.		Y	Y					
Medical center, clinic, laboratory.		Y	Y	Y				
New car sales.			Y			Y		
Nursing and convalescent homes.				Y				
Offices, banks.	Y	Y	Y	Y	Y	Y		
Parking, indoor storage, other	Y	Y	Y	Y				
accessory uses.								
Personal service establishments.	Y	Y	Y					
Place of worship.	Y	Y	Y	Y				
Printing and reproduction.		Y	Y	Y				
Public building.	Y	Y	Y	Y	Y			
Public parking garage.		Y	Y					
Public service corporation.	Y	Y	Y	Y				
Research and development facilities.			Y	Y				
Residential: multifamily, townhouse.		SP						
Residential: one and two family	Y							
homes, apartments.								
Residential: not more than 50% of		Y				Y		
structure.								
Restaurant, lunchroom.		Y	Y		Y	Y		
Retail bakeries and confectionaries.						Y		
Retail establishments.	Y	Y	Y		Y	Y		
Swimming and/or tennis clubs.	SP	SP	SP	SP				
Taxi depot		Y	Y					
Wholesale establishments.						Y		

Source: North Andover Zoning Bylaw (2002), 42-49. "Y" means permitted, "SP" means special permitted.

North Andover's commercial district use regulations could be improved with clear definitions and use groupings. Most likely because of bylaw amendments made over time, the lists of allowed and special permitted uses in the Zoning Bylaw refer to uses that seem to have the same meaning even though they are worded differently. For example:

- In the VC and GB Districts, permitted uses include "hall, club, theater, or other place of amusement of assembly," while the phrase "indoor place of amusement or assembly" appears in the list of permitted uses for B-2 and B-3. These uses are not defined in the Zoning Bylaw, so it is not clear whether the town means to differentiate the kinds of indoor entertainment or assembly establishments allowed in each district.
- All districts except B-4 permit "retail establishments," but "retail" for GB and VC includes a
 more extensive list of examples, including "retail bakeries or retail confectionaries." Since
 these uses are not explicitly mentioned elsewhere, it is not clear whether the town intends to
 prohibit them in B-1, B-2 and B-3.

Grouping uses according to a set of consistent criteria helps to identify uses that may create incompatibility problems, uses that make sense to encourage in one district over others in order to create business clusters, or uses that could be regulated more effectively if they required a special permit when they exceed a certain size. There are potential use incompatibility concerns in North Andover, but from an economic development perspective there are also strategic issues caused by the inclusion or omission of certain uses in the business districts. For example:

- North Andover encourages research and development facilities in all four industrial districts and two business districts: B-3 and B-4. The prevalence of this use in North Andover's zoning suggests a strong desire by the town to promote high-end industrial development. However, B-4 exists in scattered locations on Route 114 and the only B-4 area with a recognizable district form is at the intersection of Andover Street (Route 125), Peters Street (Route 133) and Turnpike Street (Route 114) by the Andover town line.
- "Personal service establishment" is a standard feature of business zones in downtown and neighborhood business districts. As defined in the Zoning Bylaw, a personal service establishment provides "personal services to the public such as shoe repair, barbering, dry cleaning, etc." Ironically, the General Business District use regulations omit personal services establishments, yet GB is the town's largest business district and it includes Downtown North Andover. One would imagine that the town does not intend to prohibit a barber shop in Downtown North Andover, but since the bylaw explicitly recognizes "personal service establishments" in B-1, B-2 and B-3, a literal reading suggests that barber and shoe repair shops are not allowed in the downtown area.
- In several ways, the regulations for B-4 seem to anticipate an industrial zone more than a
 commercial zone. Not only does B-4 allow research and development facilities by right, but
 also it prohibits traditional commercial uses such as retail and food service establishments
 except as accessory uses.
- North Andover's Zoning Bylaw conspicuously omits purpose statements for all of its zoning districts. In the absence of purpose statements, one must look to permitted uses, density and development regulations and try to infer a community's goals. The mix of uses in North

Andover's commercial and industrial zones conveys a blurred image of what the town hopes to accomplish, both for its land use pattern and the composition of its local economy.

- North Andover has no policies in place to regulate or restrict "big box" commercial development.
- The use and dimensional regulations for development in the GB District may be appropriate
 in many locations, but they do not reflect the established pattern of development or mix of
 uses in Downtown North Andover. The lack of development tools for an environment like
 the downtown area is a significant weakness in North Andover's Zoning.

RECOMMENDATIONS

- Consolidate and reorganize the Business and Industrial Districts, considering the conceptual alternatives illustrated in Map 4. Objectives:
 - To simplify and clarify North Andover's Zoning Bylaw.
 - To increase the value of existing business and industrial property, wherever possible.
 - To encourage new investment and reinvestment in North Andover's commercial and industrial land.
 - To promote sensible economic development.
 - To promote Smart Growth.
- Proposed New/Replacement Districts
 - Commercial Zoning Districts
 - Downtown Business District
 - Neighborhood Business District
 - Commercial Business District
 - Industrial Zoning Districts
 - Industrial-1³⁷
 - Industrial-2
 - Transitional Business District

³⁷ Proposed Industrial-1 is very similar to North Andover's existing Industrial-2. The more significant changes involve the mix of industrial uses in proposed Industrial-2. See Map 4.

Related Zoning Amendments

- Provide brief definitions of uses and group them by impact or density classes. For example, "Group 1 Residential Uses" might include detached single-family dwelling, accessory dwelling, and two-family home," while "Group 2 Residential Uses" could include multi-family dwelling (buildings of 3+ units) or townhouses up to five units/acre, or accessory residential dwellings in a mixed-use building." "Group 3 Residential Uses" could include multi-family or townhouse dwellings at a density greater than five units per acre or any multi-family or townhouse development of more than 100 units," and "Group 4 Residential Uses" could include institutional-residential facilities such as college dormitories, assisted living facilities, or nursing homes." This method of grouping uses enables communities to simplify the way they refer to permitted, special permitted or prohibited uses elsewhere in a zoning bylaw, and it helps to determine the requirements that should apply to "related uses" not explicitly identified but clearly intended within the meaning of the bylaw.
- Provide "campus-style" industrial development regulations for industrial parcels of 10 or more acres.
- Allow modest frontage waivers and/or a higher FAR by special permit in the Neighborhood and Commercial Districts in exchange for:
 - Access management: shared driveways and shared parking area or structured parking facility serving two or more commercial sites.
 - For redevelopment projects, reduce or eliminate existing front parking and relocate parking areas to the side and rear of a site.
 - Sub-grade parking (for which a height waiver may also be required in Neighborhood Business.
 - Developer contribution to a community facilities fund, based on a fee schedule
 established by the town pursuant to its capital improvements plan, for sidewalks,
 landscaping, lighting, pedestrian/bicycle and other amenities in the business districts.
- Prohibit parking between the street and the front of new commercial buildings and reduce minimum front yard setback requirements in all commercial districts.
- Require wide sidewalks <u>particularly</u> in Neighborhood Business District developments wherever feasible, or allow the developer to pay a fee in lieu of sidewalks to a community facilities fund.
- Allow a higher FAR and modest increase in building coverage in the Industrial-1 and Industrial-2 Districts in exchange for a significant reduction in surface parking area by providing sub-grade parking or a structured parking facility.
- Adopt design guidelines for commercial and industrial development, and incorporate architectural design review into the Site Plan Review process.

- Establish a maximum gross floor area (GFA) for commercial uses in the (proposed)
 Downtown Business and Neighborhood Business Districts, and a GFA threshold over
 which a special permit would be required for commercial uses in the Commercial
 Business District. Include large-scale commercial development design requirements in
 the special permit granting criteria.
- Encourage two-family homes, multi-family dwellings and accessory dwellings in commercial buildings, especially in the Downtown Business and Neighborhood Business Districts. For vertical mixed-use buildings, increase the maximum GFA for accessory residential uses to 65% from the existing 50%.
- Eliminate the "Fiscal Impact" submission currently required under Site Plan Review. Fiscal impact may be an appropriate consideration when reviewing a proposed use, but Site Plan Review is not a review procedure for <u>use</u>. Rather, it is a review for the design, public safety, public utilities and operational features of a proposed development. The town could not reject a site plan submission on the basis of a fiscal impact analysis, so requiring the developer to supply one seems excessive.
- Institute a minimum requirement for open space as a percentage of lot area in all commercial and industrial districts except the Downtown Business District.

Table 8: Recommended Dimensional and Intensity Regulations

Standard	Downtown	Neighborhood	Commercial
	Business	Business	Business
Lot Area	10,000	25,000	80,000
Height	40	45	60
Frontage	50	125	200
Front Setback	N/A	20	25
Side Setback	20	25	25
Rear Setback	20	35	25
Floor Area Ratio	1.25	1.00	1.25
Building Coverage	50%	40%	35%
Open Space % Lot Area	N/A	20%	20%

Standard	Industrial 1	Industrial 2	Transitional
			Business
Lot Area	80,000	217,800	50,000
Height	55	55	60
Frontage	150	150	150
Front Setback	50	100	30
Side Setback	50	200	20
Rear Setback	50	200	50
Floor Area Ratio	1.50	1.00	1.50
Building Coverage	35%	35%	35%
Open Space % Lot Area	25%	30%	20%

Table 9: Recommended Off-Street Parking Regulations

Use	Minimum Required Number of Parking Spaces
Residential Uses	
Single-family or two-family dwelling	2 per unit
3 or more units (multi-family)	2 per units of two+ bedrooms
	1.5 per one bedroom
	1 per studio unit
Over-55 housing	1.5 per unit
Assisted living facility	0.5 per unit, plus 1 per employee on each shift
Congregate living residence	.75 per unit
Other housing	1 per sleeping room for single or double occupancy
Nursing home	1 per three rooms, plus 1 per employee on each shift
Non-Residential Uses	
Auditorium, convention hall	1 per three seats, plus 1 per two employees
Theatre	1 per four seats or 10 spaces per 1,000 NLA
Restaurant	1 per 4 seats, 1 per employee on each shift
Retail, store, personal or business service	4 spaces per 1,000 ft ² NLA, up to 120,000 ft ² NLA; 4.5
	spaces per 1,000 ft ² NLA over 120,000 ft ² NLA
	5 per 1,000 ft ² NLA for convenience stores
Office	1 per 250 ft ² NLA on ground floor; 1 per 300 ft ² NLA in
	the basement and upper stories
Industrial or manufacturing facility	1 per 500 ft ² for first 25,000 ft ² NLA; 1 per each 650 ft ²
	portion of building between 25,000-50,000 NLA; 1 per
	each 800 ft ² NLA for portion of building exceeding
	50,000 ft ² NLA
Medical office or research facility	One per 500 ft ² NLA
Hotel	0.9 per room, plus one additional parking space for
	each three employees, 75% of the requirement for other
	uses associated with the establishment

<u>Notes</u>

- Provide authority to the Planning Board to reduce or waive off-street parking requirements for development in Downtown North Andover in exchange for "in-lieu-of" payments to an Off-Street Parking Fund.
- Establish a workable, clear formula for determining parking requirements in mixed-use developments, e.g., 100% compliance for the use with the largest parking requirement and 75% for all other uses.
- Adopt parking lot design standards comparable to existing requirements for the Village Commercial District.
- Allow a modest amount of parking in front of commercial buildings <u>only</u> in exchange for some public benefit, such as a distinctive pedestrian walkway design, additional landscaping and screening, or for a mixed-use development that includes affordable housing units.
- Through site plan review, establish minimum requirements for bicycle facilities.

Table 10: Recommended Commercial District Uses

Use Groups & Uses	DB	NB	СВ	Site Plan Review
EXEMPT USES				
Agriculture on 5+ acres of land.	Y	Y	Y	N
Public or non-profit educational uses.	Y	Y	Y	Y
Religious uses.	Y	Y	Y	Y
Day care center.	Y	Y	Y	Y
RESIDENTIAL USES				
Detached single-family dwelling.	N	N	N	
Two-family dwelling.	Y	SP	N	
Multi-family dwelling or townhouse.	SP	SP	SP	Y
Residential mix with business, up to 65% GFA.	Y	Y	SP	Y
COMMERCIAL USES				
Public Services				
Public service corporation.	Y	Y	Y	Y
Government use.	Y	Y	N	Y
Public parking garage.	Y	N	N	Y
Retail Uses			Y	
Food items: confectionery, dairy products, fruits, vegetables, groceries and meats.	Y	Y	Y	Y
Baked goods, manufacture of same for sale.	Y	Y	Y	Y
Dry goods, variety merchandise, crafts.	Y	Y	Y	Y
Clothing and clothing accessories.	Y	Y	Y	Y
Hardware, household appliances.	Y	Y	SP	Y
Household furniture, furnishings, supplies.	Y	N	Y	1
Stationary, pharmaceuticals, photographic supplies, bookstore or newsstand.	Y	Y	Y	Y
Video tape rental & sales, equipment.	SP	SP	Y	Y
Office, Banks & Related Uses				
Office for dental, architectural, engineering, legal, medical, and similar professions.	Y	Y	Y	Y
Real estate, insurance, general office	Y	Y	Y	Y
Bank, with or without drive-through facility	Y	Y	Y	Y
ATM in kiosk, drive-up access only.	N	N	Y	Y
Medical & Related Facilities				
Medical center, clinic or medical laboratory.	N	Y	Y	Y
Hospital.	N	N	Y	Y
Nursing home or convalescent home.	N	SP	Y	Y

Table 10: Recommended Commercial District Uses

Use Groups & Uses	DB	NB	СВ	Site Plan Review
Food Service & Hospitality Uses				
Restaurant: service inside or outside but on	Y	Y	Y	Y
premises, e.g., tables on deck or patio.				
Take-out food establishment, delicatessen	Y	Y	Y	Y
or catering service, no drive-through.				
Food service with drive-through.	N	N	SP	Y
Bed and breakfast.	Y	Y	N	Y
Hotel, motel.	N	N	SP	Y
Personal & Business Service Establishments				
Barber or beauty shop	Y	Y	Y	Y
Shoe/ hat repair, bicycle or household	Y	Y	SP	Y
appliance repair, laundry, dry cleaning, pressing, tailor shop with no work done on				
premises for retail outlets elsewhere.				
Shop for custom work, manufacture of	Y	Y	N	Y
articles to be sold on premises.	3/	3/	N.T.	
Shop of contractor or tradesperson.	Y	Y	N	Y
Mortuary and funeral home.	N	N	SP	Y
Printing business.	N	N	Y	Y
Cultural & Entertainment Uses				
Art gallery, museum	Y	Y	Y	Y
Cinema or theatre.	Y	Y	Y	Y
Hall, club, or other place of assembly.	Y	Y	Y	Y
Indoor recreation or amusement facility.	N	SP	Y	Y
Auto-Related Uses				
Auto service (filling) station, with or without convenience store.	N	SP	Y	Y
Auto repair, body shop.	N	SP	SP	Y
Auto sales, no outdoor sale of >10 used cars.	N	N	Y	Y
Car wash	N	N	Y	Y
Transportation Related Uses				
Transportation service, e.g., taxi depot, train station	Y	Y	Y	Y
Commercial parking garage.	Y	N	Y	Y
Accessory Uses				
Home occupation	Y	Y	N	
Structured parking garage	Y	Y	Y	Y
Incidental, enclosed storage	Y	Y	Y	Y

Table 11: Recommended Industrial & Transitional Business District Uses.

Table 11: Recommended industrial & Transitional				
Use Groups & Uses	I-1	I-2	TB	Site Plan
				Review
EXEMPT USES				
Agriculture on 5+ acres of land	Y	Y	Y	
Public or non-profit educational uses	Y	Y	Y	Y
Religious uses	Y	Y	Y	Y
Day care center	Y	Y	Y	Y
Government use	Y	Y	Y	Y
INDUSTRIAL USES				
	Y	N	SP	Y
Research & development, associated offices.	Y	Y	γ	Y
Light manufacturing & offices for the following types of industries: ³⁸	1	1	I	1
Electronic and electrical products.	Y	Y	Y	Y
Robotics and precision instruments.	Y	Y	Y	Y
Computer related products.	Y	Y	Y	Y
Instruments and related products.	Y	Y	Y	Y
Furniture and fixtures.	Y	Y	Y	Y
Millwork manufacturing.	N	Y	SP	Y
Primary and fabricated metal industries.	N	SP	SP	Y
Machinery.	N	SP	SP	Y
Transportation equipment.	N	SP	SP	Y
Apparel manufacturing.	N	Y	Y	Y
Food manufacturing, e.g., beverage and bottling	N	Y	SP	Y
companies, specialty or frozen food				
manufacturing, fruit & vegetable canning, dairy				
product manufacturing, baked goods, perishable				
foods, but not including animal slaughtering or				
processing.				
Warehousing and distribution.	SP	Y	SP	Y
Printing and publishing.	Y	Y	Y	Y
Contractor's yard	N	Y	Y	Y
Wholesale/retail sale of lumber, wood products.	N	Y	Y	Y
Recycling center	SP	SP	N	Y
Commercial waste disposal facility	SP	SP	SP	Y
TRANSPORTATION RELATED USES				
Train station, bus terminal.	Y	Y	Y	Y
Commuter parking facility.	Y	Y	Y	Y

³⁸ These industries are intended to represent types of manufacturing operations. The building commissioner should determine whether a proposed manufacturing use is sufficiently similar to comply with zoning.

Table 11: Recommended Industrial & Transitional Business District Uses.

Use Groups & Uses	I-1	I-2	TB	Site Plan Review
COMMERCIAL USES				
Health club, indoor athletic facility.	Y	Y	Y	Y
Trade school, professional or other school conducted as a commercial business.	N	SP	Y	Y
Professional, business or medical offices, clinic.	Y	Y	Y	Y
Veterinary clinic or animal hospital	Y	Y	Y	Y
Retail Uses				
Food items: confectionery, dairy products, fruits, vegetables, groceries and meats.	N	N	Y	Y
Baked goods, manufacture of same for sale.	N	N	Y	Y
Dry goods, variety merchandise, crafts.	N	N	SP	Y
Video tape rental & sales, equipment.	N	N	SP	Y
Hospitality & Food Service Uses				
Hotel, motel, inn	Y	Y	Y	Y
Convention or conference center	Y	Y	Y	Y
Restaurant: service inside or outside but on	N	N	SP	Y
premises, e.g., tables on deck or patio.				
Take-out food establishment, delicatessen or	N	N	SP	Y
catering service, no drive-through.				
Adult entertainment uses.	N	SP	N	Y
Accessory Uses ³⁹				
On-site resident watchperson's quarters.	Y	Y	Y	Y
Parking, including structured parking.	Y	Y	Y	Y
Incidental storage.	Y	Y	Y	Y
Food service, retail, other services primarily for	Y	Y	Y	Y
employees and customers of primary				
establishment.				

 $^{^{\}rm 39}$ Accessory uses would be included in the Site Plan Approval process for the principal use.

North Andover Master Plan

The North Andover Master Plan identifies six economic development goals:

- Increase the tax base in order to shift our tax burden from residential to commercial and industrial uses.
- Promote the highest and best use of the Lawrence Municipal Airport property in order to maximize benefits to the Town of North Andover and City of Lawrence.
- Promote clean, industrial development consistent with the character of North Andover.
- Encourage economic development on Routes 114 and 125 while resolving land use, traffic, and circulation conflicts.
- Strengthen and sustain downtown's role as the business, civic, social, cultural, and governmental center of North Andover.
- Establish small, neighborhood service centers in residential areas.

These goals remain appropriate for the Town. The Community Development Plan supports them in the following ways:

- Except for the recent agreement between Lawrence and North Andover to redevelop a portion of the Lawrence Airport property, it is unlikely that North Andover will be able to rezone more land for commercial and industrial use. Moreover, zoning additional land for non-residential development may perpetuate sprawl and effectively reduce the fiscal advantages that North Andover hoped to achieve when the Master Plan was completed four years ago. The Community Development Plan recommends that North Andover focus on encouraging higher-density development in established commercial and industrial areas, providing adequate public facilities for economic development (such as public parking), and working with the owners of 1600 Osgood Street (Lucent Technologies) to support the site's redevelopment.
- The Community Development Plan recommends changing the existing zoning for Downtown North Andover (GB) to a new district, the Downtown Business District.
- The Community Development Plan recommends zoning incentives to encourage shared access and shared parking in commercial districts along Route 114 and Route 125.
- The Community Development Plan does not recommend zoning more land for neighborhood service districts; it <u>does</u> recommend consolidating existing neighborhood business nodes under a common set of use and dimensional regulations with somewhat more use-intensive development opportunities than the town currently offers.

Strategy Paper HOUSING

A community's physical evolution from hamlet to modern suburb is revealed by the styles, age and location of its homes. Housing plays a crucial role in shaping the visual and social character of cities and towns, yet the recurring irony about housing is that most residents think their communities already have too many homes. Concerned about losing open space and financing the cost of public schools, citizens and town officials seek ways to contain housing growth, but in many cases the techniques they choose bring unintended – and unwanted – consequences.

Today, town planning faces several challenges that stem, directly and indirectly, from concerns about residential development. One of these challenges involves housing choice: the degree to a community's regulations encourage housing styles, sizes and prices that meet the needs of current and future households. However, market demand holds more sway than any other factor, including zoning, over the types of homes that are built. As a result, even in communities that have zoned to provide housing choice, the market often bows to cultural values that make single-family homes the preferred way of life for most Americans in non-urban areas. Accordingly, another challenge is whether communities that want a mix of homes should move beyond their traditional role as regulators and become activists in the realm of housing production.

Both of these challenges seem to exist in North Andover, a desirable, rapidly growing suburb on the northern arc of I-495. Over time, North Andover has zoned to provide for varied types and densities of housing development, to guide growth away from Lake Cochichewick, to encourage village density and development patterns along Route 114, and to preserve open space in new subdivisions. The town has also adopted zoning to control growth impacts by requiring developers to phase their projects and by limiting the number of homes that can be built each year. Like other communities that seek to plan for their future, North Andover faces difficult housing policy choices that relate to all other aspects of managing growth and change. A community influences the make-up of its population by the choices it makes to regulate housing growth, and North Andover is no exception. Since 90% of North Andover's land is zoned for residential development, housing is a major public policy issue for the town.

HOUSING TRENDS

North Andover's identity is indelibly shaped by its homes. Though most of the town's new housing units are large, spacious, expensive single-family residences, North Andover has a striking inventory of older multi-family housing units, modest one- and two-family homes and late-20th century apartments and condominiums. While a majority of the town's housing stock is comprised of single-family homes, North Andover is refreshing among suburban communities for its degree of housing choice.

Physical Characteristics of Housing Stock

North Andover's 9,943 housing units represent a broad range of residential use types. Table 12 shows that more than 40% of the town's housing inventory consists of multi-family homes and

apartments. In terms of housing stock diversity, North Andover exceeds all other suburbs and small towns in the immediate region.

Table 12: Composition of Housing Stock, North Andover & Region

1	Type of Structure									
	6: 1		`		0.1	0/ 01 1				
	Single-	2-4 Unit	5-9 Unit	10+ Units	Other	% Single-				
Community	Family					Family				
	Homes									
Andover	8,474	1,152	351	1,576	37	73.1%				
Boxford	2,442	97	65	6	0	93.6%				
Georgetown	2,309	249	40	18	0	88.3%				
Haverhill	10,107	8,746	1,658	3,191	35	42.6%				
Lawrence	4,771	14,269	2,165	4,360	36	18.6%				
Methuen	10,307	4,237	608	1,727	6	61.0%				
Middleton	1,719	366	108	136	18	73.2%				
NORTH ANDOVER	5,609	2,099	652	1,570	13	56.4%				
North Reading	4,029	312	30	451	48	82.7%				
Topsfield	1,842	224	47	23	8	85.9%				
Wilmington	6,368	490	50	244	6	89.0%				
Regional Inventory	57,977	32,241	5,774	13,302	207	52.9%				
North Andover %	9.7%	6.5%	11.3%	11.8%	6.3%					

Source: Census 2000, Summary File 3, Table H-30.

Homes in North Andover are generally in good condition. More than 80% of the town's entire housing inventory was built after 1940, and neither federal census data nor local records indicate evidence of overcrowding or serious substandard conditions. A recent lead paint screening report by the Massachusetts Department of Public Health shows a 0% incidence rate among children living in North Andover.

Housing Market

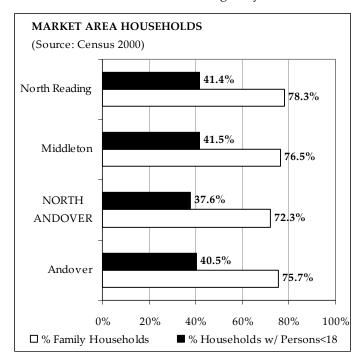
Most of the state's high-growth communities are nestled between Boston's two circumferential highways, Route 128 and I-495, and on Cape Cod and the Islands. Owing to its location along the northern arc of I-495, North Andover is among several communities that began to grow rapidly when the interstate highway was completed during the 1960s. Although Merrimack Valley home prices are somewhat lower than prices in high-growth towns along the I-495 corridor west and south of Boston, communities throughout Eastern Massachusetts have been pressed to house new families at a pace that surpasses the rate of new-home production, and North Andover is no exception.

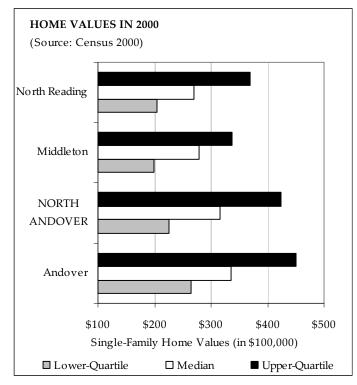
Homebuyers. Much like watersheds, housing markets are not limited by municipal boundaries. Market choices are made on the basis of household income – what a buyer can afford – while factors such as public school quality, commute distance and convenient highway access narrow

the field. Ultimately, homebuyers may investigate homes for sale in a cluster of towns that seem more or less equal in terms of their advantages. The preferences of homebuyers, developers and the communities themselves, by the choices they make to zone land, converge to shape housing demand and supply characteristics at local and sub-regional levels.

North Andover is part of a subregional market that includes communities such as Andover, Middleton and North Reading: towns with demographically similar home seekers and overlapping range of housing prices. Despite important differences between them, these communities bring several qualities to the market: high-quality school and town services, access to regional employment, a housing inventory comprised mainly of single-family homes, and home prices that, while high, are affordable to a broader mix of homebuyers than the Boxford-Topsfield market area. A majority of the subregion's new homebuyers are upper-middle income families who have, or will have, school-age children, as the Department of Education recognized in a recent study of statewide school enrollment growth (1999).

Market conditions throughout Eastern Massachusetts can be traced to a complex weave of





federal and state policies: interstate highways that opened once-rural areas to new growth, housing policies that siphoned investment away from cities, and public finance policies that sway municipalities to attract business growth in exchange for the promise of tax revenue. Current

residents of North Andover's sub-region may lament recent growth rates, but few people in any of these communities remember when the populations of North Reading and Middleton were virtually equal (c. 1940). The early 1960s completion of I-495 caused North Andover's population to grow by 85% over the course of two decades, and more than 60% of the subregion's owner-occupied housing units today were built since 1960, as shown in Table 13.

Table 13: Age of Housing Stock & Owner-Occupied Housing Units

Year Built	Andover	NORTH	Middleton	North	Sub-Region
		ANDOVER		Reading	
All Homes					
1990-2000	1,195	1,401	578	728	3,902
1980-1989	1,608	1,599	488	688	4,383
1970-1979	1,762	2,088	270	614	4,734
1960-1969	1,775	1,552	178	764	4,269
1950-1959	1,464	931	238	1,103	3,736
1940-1949	526	545	170	282	1,523
1939 or earlier	<u>3,260</u>	<u>1,827</u>	<u>425</u>	<u>691</u>	<u>6,203</u>
Total	11,590	9,943	2,347	4,870	28,750
% Built 1960-1980	30.5%	36.6%	19.1%	28.3%	31.3%
% Built 1980-2000	24.2%	30.2%	45.4%	29.1%	28.8%
Owner-Occupied Homes					
1990-2000	961	1,195	547	710	3,413
1980-1989	1,225	1,318	453	613	3,609
1970-1979	1,492	1,314	213	488	3,507
1960-1969	1,540	1,043	126	625	3,334
1950-1959	1,309	752	194	1,008	3,263
1940-1949	368	362	134	282	1,146
1939 or earlier	<u>1,996</u>	<u>1,089</u>	<u>307</u>	<u>611</u>	4,003
Total	8,891	7,073	1,974	4,337	22,275
% Built 1960-1980	34.1%	33.3%	17.2%	25.7%	30.7%
% Built 1980-2000	24.6%	35.5%	50.7%	30.5%	31.5%

Source: Census 2000, Summary File 3, Tables H34, H36.

As the youngest of the "Baby Boomers" began to form new households a decade ago, they sought suburban housing: most of them had been suburban children, and a large percentage of the state's highest-paying jobs are in suburban locations. In Massachusetts, the housing pipeline was poorly equipped to handle new demand for homes, for the state's 8.7% growth in households (1990-2000) was met by only a 6% increase in housing units. Table 14 shows that the same trend occurred throughout North Andover's market area, for the rate of household growth consistently exceeded the rate of housing unit growth. In all but Middleton, the rate of household growth also surpassed the rate of population growth. Households – not population – create housing demand.

North Andover's low homeownership vacancy rate of .4% indicates that properties for sale move quickly and that the level of market demand surpasses the available supply of homes. Throughout the 1990s, the median sale price of single-family homes increased by 70%. North

Andover has become a "buy-up" market: a desirable community that attracts second-time homebuyers. For many, "buy-up" means a new or larger house that needs little improvement. However, North Andover also offers older, more affordably priced homes that increase significantly in value with investment in renovations, an addition or modernization. For every new single-family home permit issued in North Andover during the 1990s, about 6 permits were issued for substantial home improvement projects: expansions, second-story additions, and major investments in remodeling. Both new-home construction and re-investment in residential properties have contributed to the 48% increase in North Andover's single-family home values since 1999.

Table 14: Population, Household and Housing Unit Growth, 1990-2000

Measurement	Andover	NORTH	Middleton	North	Market Area
		ANDOVER		Reading	
Population					
1990	29,151	22,792	4,921	12,002	68,866
2000	31,247	27,202	7,744	13,837	80,030
% Change	7.2%	19.3%	57.4%	15.3%	16.2%
Households					
1990	10,429	7,893	1,828	4,072	24,222
2000	11,305	9,724	2,305	4,795	28,129
% Change	8.4%	23.2%	26.1%	17.8%	16.1%
Housing Units					
1990	10,892	8,271	1,907	4,176	25,246
2000	11,590	9,943	2,347	4,870	28,750
% Change	6.4%	20.2%	23.1%	16.6%	13.9%

Source: Census 2000, SF File 1, Table DP-1; 1990 Census, Summary File 1, Table DP-1.

Renters. North Andover's rental market area extends across a dozen communities in a triangle formed by I-95, I-93 and I-495. Both regionally and statewide, the scarcity and cost of rental housing give prospective renters limited choice. In some towns, rental housing is comprised of many age-restricted units, such as elderly housing owned by housing authorities or private investors, making portions of the rental inventory unavailable to a larger market of tenants. Furthermore, the needs of tenants vary considerably: young citizens looking to establish their independence, new families who need a short-term rental while they search for home to buy, senior citizens who no longer want the burden or expense of homeownership, and households that cannot afford to buy a home or simply prefer to rent. In short, the "demand" side of the rental housing market is hardly uniform. As for the supply side, at least four conditions exist in North Andover's area: the inventory is fairly diverse, expensive in relation to renter incomes, older than the supply of homeownership units, and vulnerable to homeownership conversion.

⁴⁰ North Andover Annual Town Reports, 1990-2000. See Reports of Building Inspector. Data compiled by author.

⁴¹ Mass. Department of Revenue, Municipal Data Bank [database online] "Average Single-Family Tax Bill," in EXCEL file format as "bill98.xls" sequentially through "bill03.xls," available at http://www.massdor.gov/, INTERNET [cited January 2002; January 2003].

By policy, North Andover and most towns nearby discourage multi-family housing by limiting residential uses to single-family homes or allowing attached units at a density high enough to attract some condominium development but not high enough to attract rental development. Very few rental units have been added to the regional housing inventory since the 1980s, yet many communities absorbed significant residential growth during the past decade. Table 15 shows that regionally, 5.4% of all renter-occupied housing was built between 1990-2000 while 68.9% predates 1970. Lawrence, Haverhill and Methuen account for nearly 81% of the rental units, followed by Andover and North Andover with 13.5%.⁴²

Table 15: Rental Housing Characteristics in North Andover Market Area

			Year	Built			
Community	Renter-	00	90	30	20	%	% Apt.
	Occupied	-20	1980-1990	1970-1980	Pre-1970	Single-	Buildings
	Units	066	980	970	Pre	Family	of 10+
		-	1	1		Homes	Units
Andover	2,414	194	346	251	1,623	13.9%	45.2%
Boxford	72	0	24	0	48	48.6%	8.3%
Georgetown	350	18	57	100	175	28.3%	5.1%
Haverhill	9,138	507	851	1,361	6,419	5.0%	29.6%
Lawrence	16,594	729	1,658	2,173	12,034	3.4%	25.0%
Methuen	4,640	112	679	751	3,098	10.2%	30.4%
Middleton	331	27	35	52	217	28.1%	2.4%
NORTH ANDOVER	2,651	177	253	721	1,500	5.6%	40.3%
North Reading	458	13	40	126	279	18.1%	48.9%
Topsfield	232	0	47	66	119	21.6%	9.9%
Wilmington	<u>678</u>	<u>246</u>	<u>32</u>	<u>50</u>	<u>350</u>	41.3%	31.1%
	37,558	2,023	4,022	5,651	25,862	7.0%	29.1%

Source: Census 2000, Summary File 3, Tables H30, H32.

Regardless of any other factors that may differentiate renter households in North Andover's area, they have at least one challenge in common: the high cost of housing in relation to income. Measured by monthly rents alone, i.e., excluding utility costs not included in rent, tenants pay anywhere from \$550-575 per month in Lawrence or Haverhill to \$1,200 per month in Boxford. To some extent, the variation in rental prices reflects the size and type of rental structure, unit sizes, and the percentage of rental inventory that is subsidized by federal or state sources. On a price-per-room basis, Andover, North Andover, Topsfield and Boxford offer the most expensive rental housing and Middleton, the lowest, with North Reading at the midpoint. These statistics reflect conditions on April 1, 2000, but while rental charges have undoubtedly increased since then, the order-of-magnitude relationship between rents in each community has most likely remained the same. Of the town's 219 vacant units on April 1, 2000, 73 were available for rent.

Unless they qualify under federal income guidelines, households searching for a suburban apartment face difficult odds of finding one they can afford, particularly in North Andover. In

⁴² Census 2000, Summary File 3, Table H-7.

April 2000, there were 1,359 vacant units for rent in the 11-town area, 5.4% of them in North Andover. Eight percent of the region's vacant units were for rent at monthly rates of \$1,000 or more – an asking rent that applied to 23% of the vacant units in North Andover. However, for both existing and soon-to-be tenants, the issue is not only monthly rents charged by landlords, but also the cost of utilities. Depending on the type of unit and whether it is subsidized, utilities add \$45 to \$100 per month to the base rent paid by renter households. Table 16 compares renter costs to incomes and provides a summary of units for rent and the median rent asked in each community.

Table 16: Characteristics of North Andover Area Renter Households

Community	Renter-	Median	Median	Gross Rent	Vacant	Median Rent
	Occupied	Renter	Gross Rent	as %	Rental	Asked for
	Units	Household		Household	Units	Vacant Units
		Income		Income		
Andover	2,414	41,124	781	22.8%	67	757
Boxford	72	51,250	1,256	29.4%	4	725
Georgetown	350	15,972	515	38.7%	9	950
Haverhill	9,138	27,952	658	28.2%	272	633
Lawrence	16,594	21,163	607	34.4%	640	536
Methuen	4,640	30,000	645	25.8%	189	625
Middleton	331	30,125	423	16.8%	24	433
NORTH ANDOVER	2,651	42,780	879	24.7%	73	639
North Reading	458	35,081	783	26.8%	21	950
Topsfield	232	30,909	625	24.3%	6	625
Wilmington	<u>678</u>	50,481	948	22.5%	<u>54</u>	759

Source: Census 2000, Summary File 3, Tables H7, H18, H38, HCT1, HCT12.

HOUSING AFFORDABILITY

Chapter 40B

Though North Andover has lower-cost homes, very few meet the definition of an affordable housing unit under state law. In Massachusetts and most states across the country, the term "affordable housing" means homes made affordable to lower-income households by a deed restriction or covenant that restricts sale prices and rents as the units are vacated, sold or leased to new tenants. North Andover currently has 529 housing units, and 140 more under construction or in the pipeline, that qualify as "affordable" under Chapter 40B,438 a law that is highly controversial in most communities because it overrides local zoning regulations that make lowand moderate-income housing economically infeasible to build.

The device that overrides local zoning is a comprehensive permit. Enacted in 1969, Chapter 40B establishes a legal presumption of unmet housing needs when less than 10% of a community's

⁴³ Department of Housing and Community Development (DHCD), "Chapter 40B Subsidized Housing Inventory," April 2002, http://www.mass.gov/dhcd.html.

year-round housing stock is affordable to households at or below 80% of median family income. Generally, communities that do not meet the 10% threshold must issue a comprehensive permit unless there is a compelling basis to deny one. Developers, in turn, may ask the state's Housing Appeals Committee (HAC) to overturn a local Zoning Board of Appeals (ZBA) decision. In most cases they negotiate a compromise with town officials, but HAC's less frequent overrides have left a lasting impression on communities and form the basis for most of the opposition from local governments today.

All 529 units currently in North Andover's Chapter 40B inventory are renter occupied (52% agerestricted). The inventory represents 5.35% of the town's year-round housing stock. However, in the past two years the ZBA has issued comprehensive permits for three homeownership developments with a total of 484 homes, including 129 Chapter 40B units, and is reviewing two more proposals: a 16-unit development with four affordable homes, and a 28-unit development with 7 affordable homes. If all 140 recently approved and proposed affordable units are added to North Andover's Subsidized Housing Inventory, 6.67% of the town's housing stock will meet the definition of "affordable" under Chapter 40B. Statewide, 8.45% of all houses and apartments meet the statutory definition of "low- and moderate-income housing units," though only 27 of the state's 351 communities have produced enough subsidized housing to satisfy the 10% goal. While cities top the list for affordable housing production, a few towns also exceed 10%. Fig. 10 shows that the percentage of subsidized housing in North Andover's area varies quite a bit. Across the region, there are 9,253 Chapter 40B units or 8.48%, much like the state as a whole. Lawrence tops the list for number and percentage of Chapter 40B units, but excluding the region's cities – Lawrence, Haverhill and Methuen – most of the towns exceed the average percentage of Chapter 40B units for suburban communities throughout the state, or 2.77%.44

Other Measures of Affordability

The legislature's intent in enacting Chapter 40B was to assure a "fair-share" distribution of low-income housing across the state, but housing policy analysts do not define affordable housing need on the basis of a fixed 10% standard. The national definition of housing affordability assumes that a home is affordable to its owners if their monthly housing costs – a mortgage payment, property taxes, and house insurance – are equal to or less than 30% of their monthly gross income. Similarly, an apartment is considered affordable to tenants if they pay 30% of their gross monthly income, or less, for rent and utilities. Under these criteria, "affordable housing need" exists when households pay more than 30% of their gross income for housing costs. In housing industry parlance, they are classified as "housing-cost burdened." According to recent federal census data, 21.3% of all homeowners in the Lawrence metropolitan area and 21.2% in North Andover qualify as housing-cost burdened. The condition is more pronounced among renter households, for 36.2% of Lawrence-area tenants pay more than 30% of their monthly income for rent and utilities, compared to 30.6% in North Andover. Table 12 provides comparative data on the incidence of rental housing cost burden in North Andover and other communities nearby, particularly among elderly and low-income renters.

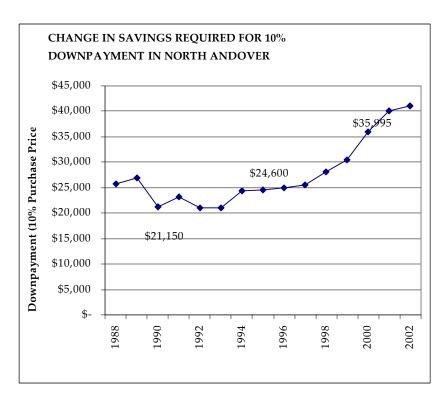
⁴⁴ Affordable housing percentages derived from DHCD Subsidized Housing Inventory; "suburban communities" refers to 53 towns defined as suburbs in Department of Revenue "Kind of Community" classification system.

⁴⁵ Census 2000, Summary File 3, Tables DP-4 and H-84.

In a competitive real estate market like North Andover, the cost of housing creates a significant challenge for lower-income households. The measure of "low- and moderate-income" varies by household size and region, but by federal definition, a household meets the moderate-income threshold if its annual income is equal to or less than 80% of area (regional) median income. After each decennial census, the U.S. Department of Housing and Urban Development (HUD) publishes the estimated percentage of moderate-income households, families and persons in all cities and towns across the country, down to census block groups – generally, sub-areas within each community. Recently released HUD statistics show that in April 2000, 31.4% of all households and 25.3% of all persons in North Andover qualified as low- or moderate-income under that year's housing program income guidelines. A decade ago, HUD placed North Andover's low- and moderate-income population at 20.4%.⁴⁶

Affordability Gap

Since the 1930s, federal housing policies have effectively subsidized homeownership – through income tax deductions for mortgage interest and real estate taxes, federal home mortgage insurance, and more recently, low-interest loans and grants that help moderate-income renters become homeowners. Though some home-seekers have more resources than lenders require, such as equity to invest from the sale of a previous home or a gift



or loan from family members, those with only their savings to put toward a downpayment find homebuying more difficult. First, while saving to purchase a home they must also pay rent, and because apartments are so scarce, market rents have become very expensive. Second, since the purchase price of a house usually determines the downpayment amount, first-time homebuyers end up saving toward a moving target: the sale price of homes in a very tight real estate market.

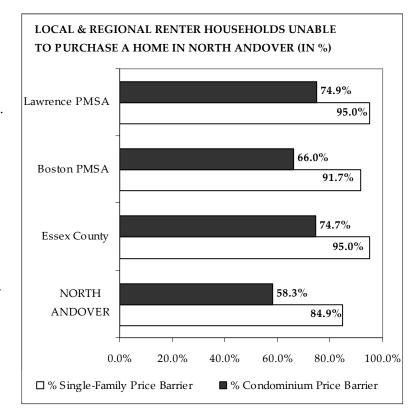
⁴⁶ HUD, "Census 2000 Low and Moderate Income Summary Data: Non-Entitlement Local Government Summaries for Low and Moderate Income Estimates," available by state, in EXCEL format, http://www.hud.gov/offices/cpd/ systems/census/lowmod/ma/index.cfm>.

Under conventional loan underwriting standards, homebuyers at North Andover's median household income of \$72,278 can afford a purchase price of about \$226,519. For them, the town's

median single-family home sale price of \$400,000 (2001) translates into an "affordability gap" of \$173,478: the difference between the sale price and the purchase price they can afford.

A sale price of \$400,000 is also high enough to preclude 64% of North Andover's present households from purchasing a house in town if they were first-time homebuyers today.

Condominiums often supply more affordability than single-family homes, and in North Andover this clearly applies. The town's median condominium sale price of \$145,000 (2001) would be affordable to about 29% of its present households if they



were first-time homebuyers. However, the more disturbing issue is the lack of access to homes or condominiums in North Andover for *renters* – many of whom are saving to purchase their first house. North Andover's median condominium sale price is unaffordable to 58% of its own renters and 75% of all renters in the Lawrence metropolitan area. In addition, North Andover's median single-family sale price exceeds the buying power of 85% of its own renters and 95% of all renters living in the Lawrence region.⁴⁷

PLANNING CONSIDERATIONS

Residential Development Trends

North Andover regulates residential land use with zoning policies that encourage single-family home development. Nearly 90% of the town is zoned for single-family homes as of right on parcels that meet minimum lot area requirements of 12,500 ft² to 87,120 ft² and minimum frontage requirements of 85-175 feet. North Andover also allows new multi-family housing as of right in two districts and by conversion of existing single-family homes in three districts. In addition, residential uses are permitted in three of the town's commercial districts, generally on a mixeduse basis, i.e., residential uses above the ground floor of commercial buildings. However, very

⁴⁷ Purchase price assumes a 10% downpayment and a 30-year mortgage at 7.5% interest.

little if any developable land remains in zoning districts where multi-family development is allowed. Over the last thirty years, low-density residential development has absorbed increasingly large amounts of the town's land, as shown in Table 17.

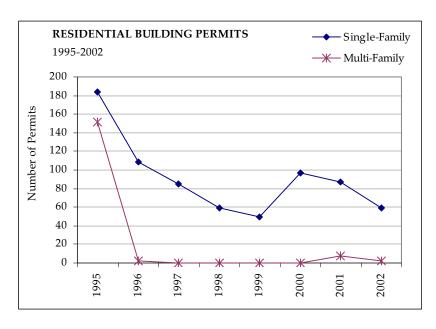
Table 17: Developed Land in North Andover, 1971-1999

Tuble 177 Bevelopen Emili 17 (1871)	Acres in Use		
Land Use	1971	1985	1999
Multi-Family	162.7	235.2	258.6
Higher-Density Single-Family	596.5	596.5	605.3
Moderate-Density Single-Family	629.0	1,195.6	1,694.0
Low-Density Single-Family	1,185.9	1,680.9	2,368.6
Commercial	174.7	249.8	273.0
Industrial	<u>275.5</u>	<u>368.0</u>	444.1
Total Developed Acres	3,024.3	4,326.0	5,643.5
Total Area (Town)	17,681.9		
% Higher-Density Housing	4.3%	4.7%	4.9%
% Moderate-Density Housing	3.6%	6.8%	9.6%
% Low-Density Housing	6.7%	9.5%	13.4%
% Commercial	1.0%	1.4%	1.5%
% Industrial	1.6%	2.1%	2.5%

Source: MassGIS. Statistics by author.

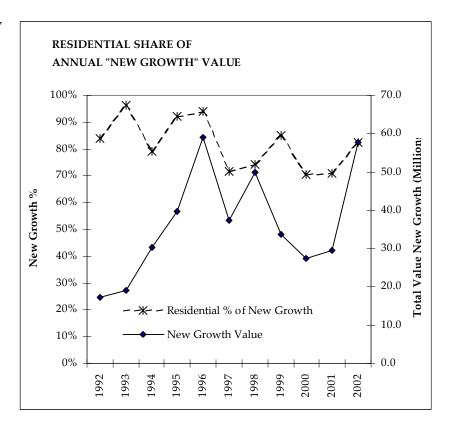
Land Use & Zoning

Zoning and the market work as mutually reinforcing agents toward a particular development outcome, and to some extent this relationship can be seen in North Andover. In most cases, the ease of developing to local regulatory preference is a greater incentive than the potential for more efficient, lower-cost land use. However, building to the single-family home market has become an economic necessity for



many developers, primarily because the high cost of land dictates construction of a large residence that will command a premium sale price. Between 1995-2000, the North Andover Planning Board approved 31 subdivisions with a combined total of 500 house lots while the Building Department issued new-construction permits for nearly 729 single-family homes and

164 two- and multi-family units.48 Attesting to the impact of high land costs and market preference on housing affordability, North Andover's newest homes (i.e., built 1997-2001) carry a median assessment of \$459,440, 60-65% of which is driven by building value. Whether in conventional or cluster subdivisions. the median value of a recently developed house lot is \$145,000.4915 It is little wonder that residential development has contributed so significantly to each year's "new growth" tax levy in North Andover.



Residential Buildout & Chapter 40B

Two years ago, Merrimack Valley Planning Commission (MVPC) evaluated North Andover's future development potential as part of a statewide program sponsored by the Executive Office of Environmental Affairs (EOEA). MVPC determined that North Andover has about 2,768 acres of vacant residential land. Given natural constraints and zoning requirements, 94% of the land could support 2,324 residences: 2,315 single-family homes and 9 multi-family units. Under MVPC's build-out estimate, new residential growth would consume more than twice the amount of land per unit as the town's established housing base does today.⁵⁰

Consistent with the state's build-out methodology, MVPC did not account for new Chapter 40B units in North Andover's future development forecast. Given the town's three recently approved homeownership developments, the Chapter 40B inventory will increase from 529 to 658 units, or 6.65% of the town's Census 2000 year-round housing base. The remaining Chapter 40B "gap" would be 333 units. However, the town accrues liability for Chapter 40B units as market-rate homes continue to be developed on relatively generous house lots. If the town were to build out to an additional 2,324 homes with no provision for affordable housing development, the shortfall

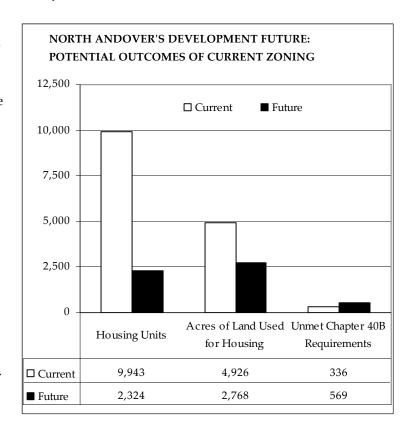
⁴⁸ MISER, "Residential Building Permits," and MVPC, "North Andover Build-out Study."

⁴⁹ North Andover Assessor's Office, "FY02 Parcel Data."

⁵⁰ In a build-out study prepared in-house for the North Andover Master Plan (1998-99), the Community Development Department estimated North Andover's future development capacity at 3,747 new homes.

would increase to about 570 units. To accommodate these 570 units, North Andover may absorb as many as 2,275 *additional* homes, i.e., beyond MVPC's build-out estimate.

Chapter 40B requires developments to include at least one affordable unit for every three market-rate units. To encourage rental production, the state counts all apartments in a comprehensive permit rental development regardless of whether the apartments rent at low-, moderate- or market-rate levels. For mixed-income homebuyer developments, Chapter 40B recognizes only the affordable units.51 Since the market-rate homes do not count toward the 10% goal, they effectively expand the yearround base that is used to calculate a community's percentage of Chapter 40B units. The impact of this policy will be evident when North Andover's Chapter 40B inventory is



updated to reflect the town's three new homeownership developments: unless the legislature enacts proposed changes to Chapter 40B, the Subsidized Housing Inventory will include the town's 129 deed-restricted affordable units, but the other 356 homes will be classified as "total development units," not Chapter 40B units.⁵²

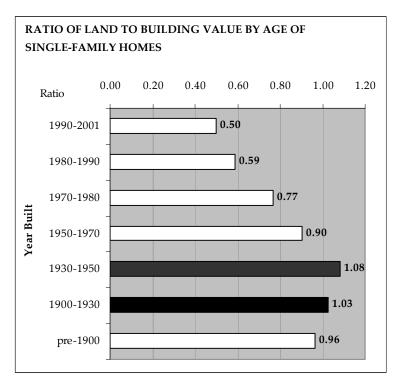
Land

Undeniably, housing demand drives the market for land in North Andover. The near doubling of land used for residential, commercial and industrial development between 1971-99 brought about a dramatic increase in the market value of land and simultaneously eroded North

⁵¹ Proposed amendments to Chapter 40B would change the way that DHCD "counts" units in a homeownership development. If the amendments become law, each community's Chapter 40B inventory will recognize 50% of the units in a homeownership project or twice the number of affordable homeownership units. Under the proposed formula, North Andover's Chapter 40B inventory would increase to about 8% because the number of recently approved low-income affordable units – 129 – would be counted as 258.

⁵² "Total development units" measures all of the housing units included in approved comprehensive permits. The only units that DHCD considers when calculating a community's percentage of low-and moderate-income housing are those classified as "Chapter 40B units."

Andover's inventory of open space, 89% of it forested.53 Virtually all of the parcelization that has occurred in North Andover since 1990 is attributable to land divisions for single-family homes. By last year, single-family parcels comprised 65% of all 9,202 parcels in North Andover, up from 59% of 8,172 parcels in 1990.⁵⁴ The gradual absorption of North Andover's best land by earlier development eras means that recent growth has occurred on increasingly marginal sites. To accommodate natural constraints and comply with the zoning and Title V regulations, new growth has also consumed more land per housing unit. As



growth continues to spread into outlying areas, the town's propensity for high residential land costs will accelerate. Throughout Eastern Massachusetts, market expectations for very large homes and the high cost of land for new development have conspired to make modest homes attractive for redevelopment. The same phenomenon is happening in North Andover.

Local data show that North Andover is not immune to the risks of "mansionization," or the practice of altering, expanding and "reinventing" a small, older home – or simply tearing it down and replacing it with a large residence.⁵⁵ Housing units built during the inter-war years (1920-1945) are particularly vulnerable in North Andover because in most cases, they are smaller and less valuable than new *or* pre-20th century homes. For example, the 510 housing units in this class tend to be 1.5-story, six-room homes (including three bedrooms) with 1,627 ft² of gross floor area. On average, they occupy .29-acre house lots and are assessed at \$208,000. Over half of their assessed value is based on *land value alone*.

RECOMMENDATIONS

When the Master Plan was completed in 2000, the town adopted five goals for housing and residential development:

⁵³ MassGIS, Vector Data Library.

⁵⁴ DOR, Municipal Data Bank [online database], "Parcels by Use Class," in EXCEL format

⁵⁵ Data for Figures 16-17 were obtained from the North Andover Assessor's Office (November 2002).

- Calibrate the rate and amount of residential development with the town's ability to provide services.
- Maintain the character of existing North Andover neighborhoods by preserving landscape features, development patterns, density and scale of new growth.
- Discourage development in environmentally sensitive areas.
- Encourage negotiated residential development in order to foster creativity, appropriate use of land, a sense of community and the highest quality projects with the maximum attainable public benefits for the town.
- Preserve the diversity of North Andover's housing stock.

These goals remain appropriate for North Andover. The Community Development Plan's recommendations to address three of the goals should be incorporated in the Master Plan by amendment to the Housing Element.

Growth management

- Amend the Phased Development Bylaw to set a maximum number of dwelling units that
 may be permitted annually, with "opt-out" provisions by special permit for types of
 development that address the town's housing, community development and open space
 needs.
 - In an effort to control the total amount of residential development and protect its drinking water supply from development impacts, North Andover requires one- and two-acre minimum lot sizes and enforces a one-unit-per lot development rule in the two zoning districts where most of its vacant land remains (R1 and R2). These techniques have and will continue to limit the number of dwelling units, but they create significant challenges to meeting other housing goals. With so many new single-family residences sized to attract families, it is not surprising that since 1990, North Andover has absorbed a 28% increase in married couples with children and a 29.2% increase in all family households with children.
 - As companion measures, North Andover also adopted a Phased Growth Bylaw (1986) and later, a Growth Management Bylaw (1996). The Phased Growth Bylaw was among several recommendations contained in the Growth Management Plan (1987). Its purpose is to buffer North Andover from a sudden, large influx of new homes by subjecting most residential projects to multi-year construction plans. The Growth Management Bylaw caps total annual development by restricting the number of permits that the Building Inspector may issue each year. When it was adopted, town meeting established a "sunset" provision for 2002 but allowed for up to four annual extensions so the town would have adequate time to plan. Last year, town meeting approved a one-year extension.
 - The Growth Management Bylaw has been very difficult to administer. In addition, a key
 justification for adopting the Growth Management Bylaw in 1996 was that the town
 needed time to update its Master Plan, which has in fact occurred. North Andover's

Phased Development Bylaw is more consistent with the growth management tools used elsewhere in Massachusetts and it provides a way to treat all developers and land owners equitably. However, it could be revised to incorporate some important features that were written into the Growth Management Bylaw, such as exemptions for affordable housing and projects that accept a voluntary density reduction.

Mandatory open space zoning

- Replace the existing open space development regulations with a mandatory open spacecluster bylaw.
 - North Andover's zoning bylaw offers developers several alternatives to conventional single-family subdivisions, such as Planned Residential Development, Large Estate Conversion, Continuing Care-Retirement, and Independent Elderly Housing. Indeed, North Andover's Zoning Bylaw has so many districts and special regulations that over time, it has become excessively complicated. It is not at all clear that North Andover is getting the kinds of projects that local officials and voters anticipated when they amended the bylaw to provide for these types of uses. The Master Plan indicates that many in North Andover have become skeptical about the benefits of Planned Residential Development, a bylaw that provides density incentives to attract developer cooperation.
 - The town's interest would be served better by a mandatory cluster bylaw that applies to all divisions of land or developments over an agreed-upon size threshold, e.g., 5 lots or 5 dwelling units on parcels over a certain size. By right, a developer would be free to pursue a conventional subdivision with fewer than 5 lots or comply with the town's open space design standards. For 5+ lots, the developer should be required to obtain a special permit from the Planning Board and design a project according to regulations outlined in the Zoning Bylaw. The result would be guaranteed open space in all developments covered by the bylaw.
 - Under the same set of regulations, the town should offer a modest density incentive to
 encourage additional public benefits, e.g., exemplary open space, affordable housing, or
 preservation of a historic home or accessory building. In the future, the town should
 consider adopting parallel open space-cluster and inclusionary housing bylaws so that all
 developments over a specified size are required to preserve open space and create
 affordable units.

Housing preservation

- Adopt demolition delay bylaw to obtain review authority over whole or partial demolition of any building over a certain age.
- Adopt companion zoning incentives to encourage reuse of existing structures for affordable
 housing, e.g., greater use intensity where appropriate, by special permit, in the R-1, R-2 and
 R-3 Districts and outside of the Watershed Protection District. (Note: conversions are already
 allowed as of right in R4 and R6). A bylaw that allows conversion of older single-family
 homes to two-or three-family use by special permit, provided that one of the units is deed-

restricted for long-term affordability, may help to secure new units eligible for Chapter 40B through the reuse of existing development.

- Develop a target list of single-family, multi-family and condominium properties for acquisition/rehabilitation in exchange for permanently affordable housing units, and establish a funding pool with CPA revenue.
 - North Andover does not have effective regulations to preserve its historic mix of single-family homes. Major expansions or alterations to existing homes and demolition-rebuild projects attract new investment to the community and they contribute to the town's "new growth" revenue under Proposition 2 1/2. However, as these activities cause older homes to appreciate in value, they also remove lower-cost housing from the market. There are about 840 single-family homes in North Andover with building values below \$100,000 relatively small residences built, on average, between 1938-45. Strategies to secure the affordability of these homes could help North Andover establish a base of Chapter 40B-eligible units for lower-income homebuyers or renters, avoid the environmental costs of new development, and preserve architectural traditions that pre-date modern subdivisions.
 - North Andover needs to consider ways to preserve its supply of "informally" affordable homes: modest single-family and two-family residences that may be affordable today but are unlikely to remain affordable in the future. Some have been well maintained while others are in a moderate state of disrepair. Many are of lower value regardless of their condition, simply because of their age and styles. As existing assets, they provide a resource that may be tapped to increase North Andover's inventory of permanently affordable homes without building more new homes on undeveloped land. Eventually, homes occupied by long-time residents will become available for purchase or rent. Those of comparatively lower values will be desirable to prospective homebuyers in search of an investment opportunity. As North Andover's base of older, lower-cost housing transitions from present to future homeowners, its "market" affordability will begin to disappear.
 - Preservation strategies are difficult to implement and they require dedicated community
 involvement. However, capitalizing on the established base of development is more
 prudent than encouraging new construction wherever possible, including for the creation
 of permanently affordable, decent housing. In consultation with the North Andover
 Historical Commission and the Massachusetts Historical Commission, confirm the status
 of the town's existing historic property inventories and determine whether additional or
 updated surveys would be required in order to qualify areas with high concentrations of
 small, older homes for local historic districts.

Comprehensive permit process

- Develop a Comprehensive Permit Policy that identifies (a) community housing needs and (b) preferences for affordable housing development, design and locations.
 - When North Andover's new Master Plan was being developed between 1997-99, the Master Plan Committee decided to emphasize rate of residential growth, open space and

neighborhood design over housing affordability because at the time, fiscal impact, water and open space protection were critical concerns to the town. Since 1997 – and particularly since 1999, when the Housing Appeals Committee (HAC) released the controversial <u>Stuborn Ltd. Partnership v. Barnstable Board of Appeals</u> ruling – there has been a significant increase in comprehensive permit activity across the Commonwealth. North Andover's recent experience as a recipient of five comprehensive permit applications is indicative of this trend.

- Today, the town has choices that did not exist five or six years ago. For example, by adopting the Community Preservation Act (CPA) in 2002, North Andover made a commitment to protect open space, create homes affordable to lower-income households and preserve its historic buildings. CPA revenue could be vital to the success of an affordable housing strategy in North Andover. In addition, by accepting an Executive Order 418 grant, North Andover agreed to address its housing, economic development and open space needs through a coherent set of local initiatives. Finally, recent changes to the state's Chapter 40B regulations offer incentives for municipalities to increase their supply of affordable housing. North Andover should make use of these incentives as appropriate. However, the town should first establish a local housing policy to unify the affordable housing activities of town boards and committees, convey clear expectations to developers, and define the criteria that will guide comprehensive permit negotiations.
- Chapter 40B creates opportunities for negotiated development in a process that differs significantly from conventional permitting. A comprehensive permit policy helps to establish the framework for community-developer negotiations. Arguably, Chapter 40B places some constraints on local officials. However, it does not prevent them from exploring trade-offs, issuing conditional permits that preserve a project's feasibility, or working with applicants to reduce the scale of a proposed development without making it uneconomic to build.
- To negotiate effectively, communities must be realistic, reasonable and clear about what they want from a Chapter 40B development. When they adopt a comprehensive permit policy, they should anticipate the ways that it may be used, and by whom. From a municipality's point of view, the policy should establish for everyone town boards, developers, funding agencies and appellate jurisdictions the boundaries of negotiation. This means that local officials must be equally clear about negotiable and non-negotiable considerations, and that town boards should not work at cross-purposes. A comprehensive permit policy should provide unambiguous guidance on the following:
 - · Community housing needs and priorities.
 - A statement of consistency with the master plan or other significant plans and policies.
 - Preferences for types of housing, location, density and scale, intensity of use, architectural design and site plan standards, other public benefits.
 - Performance standards: desired percentage(s) of affordability, income targets, term of affordability, accessibility, minimization of land use conflicts.

- Expectations concerning development in environmentally sensitive areas.
- A "local preference" policy.

North Andover Master Plan

- Designate areas that are appropriate for higher-density housing and infill development, and rezone them accordingly (Map 5).
 - Executive Order 418 encourages communities to identify areas suitable for higher-density housing as part of a larger strategy to increase the supply of affordable homes. The Community Development Office should request participation from boards and committees with an interest in housing to determine whether the town needs to identify additional areas for higher-density development, given that North Andover's zoning already provides for a continuum of lot sizes in several residential zoning districts. Although it is true that districts with smaller lot sizes have very little land available for new growth, it may be more prudent to focus on these areas for preservation, conversion and infill strategies than to induce more development in North Andover's rural areas.
 - Working with the Planning Board, the Community Development Office should pursue zoning changes to facilitate higher-density development, considering the following criteria:
 - Areas desirable for mixed-use development.
 - Areas with potential for rezoning to a higher-density district.
 - Small town-owned parcels with little or no open space and recreation value that may be candidates for disposition/development.
 - Land the town may want to acquire for open space or other purposes, for which some residential development may be an appropriate strategy to finance the acquisition.
 - Possible implementation measures include:
 - Zoning to allow mixed-use development (residential and commercial) by special
 permit in portions of the existing R4, R2 and GB Districts, provided that the
 residential component of a mixed-use development includes deed-restricted
 affordable housing units.
 - Infill development regulations.
 - Recommendations for targeted (area-specific) development, redevelopment and reuse strategies that include higher-density housing, where implementation involves a combination of zoning, public and private investment.

- "Local initiative" housing, e.g., housing developed by a community-based economic development corporation or a Local Initiative Program comprehensive permit by a private developer.
- Successful housing programs require adequate implementation capacity. The town should assign responsibility for housing policy coordination to a professional staff member and/or one or more qualified volunteers. Effective networking with regional housing organizations to make optimum use of available housing development resources.

Strategy Paper

OPEN SPACE & RESOURCE PROTECTION

Since North Andover received equivalency status for its 2000 <u>Open Space and Recreation Plan</u>, the Community Development Plan does not include a detailed analysis of the town's open space and resource protection needs. The <u>Open Space and Recreation Plan</u> is an excellent plan that includes a number of important goals and strategies. It builds on a number of studies and plans that North Andover completed in the past 15 years.

Three key themes reflect the open space and natural resource priorities in North Andover. The Community Development Plan's goals and recommendations should incorporate and integrate these important priorities.

- 1. Protect the Lake Cochichewick Watershed.
- 2. Preserve the open and rural atmosphere and uniqueness of North Andover.
- 3. Expand North Andover's recreational programs and quality of life.

This technical memorandum lists the resources that should be included on the Community Development Plan's Land Use Suitability Map, reviews the town's priorities for protecting wildlife habitat and water resources, recommends additional water quality protection measures, summarizes key findings, and includes recommendations for the Community Development Plan.

NATURAL RESOURCES AND LAND USE SUITABILITY MAP

The following resources should be included on the Land Use Suitability Map.

Water Resources

Berry Pond Salem Pond Boston Brook Sharpner's Pond Cedar Pond Shawsheen River Cochichewick Brook Stearns Pond Lake Cochichewick Stevens Pond Merrimack River Sudden Pond Mill Pond Sutton Pond Towne Pond Mosquito Brook

Osgood Pond Vernal Pools – Certified and Potential

Reservoir Wetlands

Protected Open Space

Boxford State ForestChaplin Nike SiteBruin HillChristmas Tree EstateCarter HillCyr Recreation CenterChaplin Cedar SwampFarnsworth Reservation

Fish Cedar Swamp Rea's Pond Conservation Area
Foster Farm Riverview Street Boat Ramp Site

Half Mile HillShawsheen RiverJames SwampSmolak Farm

Mazurenko Farm Conservation Area Stevens-Coolidge Place

Merrimack River Well

Osgood Hill

Town Farm/Forest

Purgatory Swamp

Ward Reservation

Memorial Park

Weir Hill Reservation

Parker State Forest Wilmot Lot

Resource Protection Buffers

High Water Mark Conservation Zone – 150' Tributaries and Lakes – 400' Wetlands – 100'

Other Resources

Chapter 61, 61A, 61B Lands

DEM designated "Scenic Landscape"

Ipswich River Watershed

Lake Cochichewick Watershed

Land with Agricultural Preservation

Restrictions (APR)

Medium and High Yield Aquifers

Open Space preserved in Planned

Residential Developments (PRD)

Parker River Watershed

Proposed Railroad Right-of-Way Trail

Shawsheen River Watershed

Trails

Watershed Protection Overlay District

HABITAT PRESERVATION AND WATER RESOURCE PROTECTION PRIORITIES

The <u>Open Space and Recreation Plan</u> includes 16 goals and a number of strategies to achieve them between 2000-2005. This plan also incorporates the recommendations made in the 2000 Master Plan for open space and natural and cultural resources. The priorities listed below are a comprehensive list of the habitat preservation and water resource protection priorities detailed in these plans.

Habitat Preservation Priorities

- Implement the new local Slope and Elevation Protection Bylaw.
- Consider changing residential zoning districts from one to two acres in portions of the town.
- Expand conservation efforts and work with DEM, DEP, the Division of Fisheries and Wildlife, the Essex County Greenbelt Association, the Massachusetts Audubon Society and The Trust for Public Land to acquire and manage open space.
- Dedicate local funds for open space acquisition through the Conservation Fund, the
- Community Preservation Act, impact fees, general obligation bonds and mitigation.

- Link open space and trails.
- Promote river access and awareness.
- Manage town-owned open space including ADA compliance.
- Use Planned Residential Development to protect the town's hilltops.
- Contact landowners to provide education and encourage participation in the Chapter 61, 61A, 61B program.
- Pursue Agricultural Preservation Restrictions on important landscapes.
- Dedicate significant roads as Scenic Roads under M.G.L. c.40 § 15C.
- Plant a variety of street trees.
- Educate regulatory boards Conservation, Planning, Health, Zoning Board of Appeals
- Water Resource Protection Priorities
- Amend the Town Charter to create a Water Commission.
- Establish a "Water Web" website.
- Continue to develop and disseminate water quality and water conservation materials.
- Include and educate the Zoning Board of Appeals in watershed protection.
- Hold a Lake Cochichewick Annual Meeting to educate landowners and citizens.
- Amend the Town Charter to create a Water Commission.
- Set water rates to encourage conservation.
- Develop watershed maps.
- Develop a town-wide Water Master Plan.
- Update the Lake Cochichewick Watershed Plan every 10 years.
- Develop a Lake Cochichewick Management Plan.
- Establish a Conservation Fund.
- Designate the Lake Cochichewick Watershed as an Area of Critical Environmental Concern.
- Refine Board of Health regulations to manage septic system maintenance in the Lake Cochichewick Watershed.

The 2000 Open Space and Recreation Plan also outlined a set of priorities to guide the town's open space protection and acquisition strategy to protect water resources, wildlife habitat and to preserve community character. These criteria (open space acquisition priorities) are listed below.

Open Space Protection and Acquisition Priorities

The first priority for open space protection is the re-establishment of the Open Space Committee, which was dissolved by the Conservation Commission. The committee is needed to update the Open Space and Recreation Plan in 2005 so the town will continue to be eligible for state grant funds. The Open Space Committee's work managing the town's open space network and trails, and its representation on the Community Preservation Committee are essential.

- Adjacent to a tributary of Lake Cochichewick
- Within the boundaries of the Lake Cochichewick Watershed
- Abutting existing, protected open space at risk of development
- Unique aesthetic, historic value or contributing to community character
- Feasibility of trail network and/or adjacent to the trail network
- Unique wildlife, wetlands, river corridor or riparian habitat
- Other Resource Protection Needs

The town's planning priorities emphasize Lake Cochichewick water quality and watershed protection. However, North Andover provides habitat types for a large number of species. The town's incorporation required that a Native American named Roger and his "company" have access to alewives in the Cochichawicke [sic] River. Local fishery resources remain important today as do grassland and forest habitats for birds and small mammals and places for amphibians and reptiles. Tracking surveys conducted at Mazurenko Farm and studies conducted by the Natural Heritage and Endangered Species Program and the Merrimack Valley Bird Club provide an inventory of the town's biodiversity. The town's resource protection goals and the open space protection criteria could be refined by conducting a gap analysis and creating a portfolio of the specific types of habitat and landscapes that are already protected in order to determine habitats and parcels that are needed to protect all the town's species.

In addition, the town might consider adding aquifer recharge areas and flood sensitive areas to its list of open space acquisition priorities. This should be researched during the next revision of the Open Space and Recreation Plan update.

Water Quality Protection: Additional Measures

The town depends on Lake Cochichewick for its drinking water and the town's water resource priorities reflect the importance of protecting this critical community resource. The 2000 <u>Open Space and Recreation Plan</u> contains many strategies including managing septic system maintenance regulations in the Lake Cochichewick Watershed. This strategy has a "B" priority

status. There is a compelling need for mandatory septic system maintenance regulations both in this watershed and throughout the town, and this should be an "A" priority. North Andover's wetlands are the headwaters of three regionally significant rivers that sustain underground aquifers and open water that surrounding towns use for drinking water. Many wells and public drinking water systems throughout the Merrimack Valley are vulnerable to poorly maintained or failing septic systems in North Andover and mandatory septic system maintenance regulations would help protect potable water.

Managing stormwater run-off to prevent non-point source pollution and to encourage infiltration and regulating nutrient concentration and run-off from phosphates and fertilizers would complement septic system maintenance regulations. Another "B" priority strategy is investigating the Holt Road Landfill and other potentially contaminated sites. The town should further investigate sources of point source and non-point source pollution and other hazards that could threaten ground and surface water quality. Underground storage tanks, floor drains, some agricultural practices, household hazardous waste, leachate and road salt can all be threats that require regulation, particularly in sensitive areas.

RECOMMENDATIONS

In order to realize the town's three most important objectives – Lake Cochichewick Watershed protection, preservation of the town's open and rural character, and increasing recreational opportunities and quality of life – the Open Space Committee developed and ranked 16 goals and their associated strategies in a 5-Year Action Plan. The Plan's most important goals are:

- Protect valuable water resources.
- Expand existing conservation efforts.
- Fund open space acquisition.
- Link open space and trails.
- Encourage open space management.
- Protect scenic hilltops, landscapes and farmland.
- Preserve historic landscapes and other historic resources.
- Facilitate and implement the Open Space Plan.

The Community Development Plan reinforces all of these goals and strategies. In recognition of the work that has been accomplished since the <u>Open Space and Recreation Plan</u> was written, however, the Community Development Plan recommends that some of the regulatory strategies with "B" priority status in 2000 – septic system maintenance, zoning and subdivision rules and performance standards, and overlay zones – be reclassified as higher priorities today.

Lake Cochichewick Management

- Consider a home rule petition to establish a Lake Cochichewick Commission that has
 development review and permitting powers within the Lake's watershed.
- The 2000 Open Space and Recreation Plan raises an important question: does North Andover
 have the institutional capacity to manage Lake Cochichewick? The Open Space Committee
 notes that residents demand, "a steady supply of potable water and a pristine appearance
 that comports with our image of an environmentally conscious North Andover."
- The Conservation Commission, the Board of Health, the Planning Commission, the Division
 of Public Works, the Division of Planning and Community Development, the Recreation
 Council and the Board of Selectmen all make decisions that affect the Lake and its watershed.
 The Plan suggests that multiple interests (development, recreation, drinking water) place
 competing demands on the Lake, but there is no but there is no central coordinating
 commission that manages this resource.

Planning and Implementation

- Focus open space and recreation resources (volunteer, staff and funds) on implementing
 North Andover's existing plans. New planning initiatives should be limited to the next open
 space plan update in 2005 and a Water Master Plan.
 - North Andover is to be commended for valuing open space and for developing a number of plans and studies to learn about and protect its resources. A number of resource-specific plans including "P8" (phosphorous loading) modeling for Lake Cochichewick, Lake Cochichewick Watershed Plans, ENSR Reports for Lake Cochichewick, and several Open Space and Recreation Plans have been completed in the past 15 years. The town has far more data and analysis available than many other towns, and the recommendations and strategies outlined in the 2000 Master Plan and the 2000 Open Space and Recreation Plan reflect this careful planning and thinking about resource protection.
 - To conserve volunteer hours, town planning staff and financial resources, North Andover ought to focus on implementing its existing open space and natural resources priorities in the next 3-5 years. Presently, the town's planning documents call for four new plans: a Water Master Plan, a Lake Cochichewick Master Plan Update, a Lake Cochichewick Management Plan and an Open Space Management Plan. Undeniably, these are important plans that should be completed and updated. However, current resources may be better spent in the near term updating regulations, acquiring land and providing education and outreach.